

## **3<sup>rd</sup> Living knowledge conference**

**Communities building Knowledge - Innovation through citizens  
science and university engagement**

## **3e conférence Savoirs vivants**

**Quand chercheurs et citoyens co-produisent les savoirs et  
les décisions scientifiques et techniques**

**30/08/2007 – 01/09/2007  
Ecole des Mines, Paris**



The conference is organised by - La conférence est organisée par :

- => **International Science Shops Network**
- => **Fondation Sciences Citoyennes**
- => **International Network of Engineers and Scientists for global responsibility**
- => **Centre of Sociology of Innovation of the Ecole des Mines**
- => **Unit Political and Social Transformations related to Life Sciences of INRA**

### **Conference themes – Thèmes de la conférence**

1. University engagement with communities - Universités et institutions de recherche : quelle ouverture à la société civile ?
2. Citizens' science and social movements - Les mouvements sociaux face au développement technoscientifique
3. Research policy from local to global: towards science in society - Politiques de recherche : Envers science en société
4. Innovation and citizens - added values for communities - Innovation, citoyens et développement durable
5. Participatory processes in science and technology - Les processus de participation du public aux choix technologiques et scientifiques

**We wish you all an interesting and stimulating conference!**  
**Nous vous souhaitons à toutes et à tous une conférence stimulante et intéressante !**

### One word on Translation – un mot sur les traductions

Dear Participants,

As you will have noticed already, our conference is bilingual. We will have presentations in English and in French. We will have professional translation during the plenaries but since this is very expensive we are not able to offer translations in all parallel sessions.

So we would like to invite you to be very open and inventive regarding language problems in order to be able to share these moments of international exchange in the best manner.

We will try to organise as much as possible translation with volunteers. If you feel ready to help translating in the sessions you will participate to, please confer to the according chairperson.

Chères participantes et chers participants,

Comme vous l'avez remarqué, notre conférence est bilingue. Nous aurons des présentations en français et en anglais. Nous disposerons de traductions professionnelles pour les plenières mais, pour des questions de coût, nous ne serons pas en mesure d'offrir un service de traduction lors des sessions parallèles.

Nous voudrions donc vous inviter à être très ouverts et inventifs en ce qui concerne ce problème de langues afin de pouvoir partager ces moments d'échange international de la meilleure façon.

Nous essayerons d'organiser des traductions avec des bénévoles. Si jamais vous vous sentez prêt à aider pour les traductions dans les sessions auxquelles vous participerez, merci de vous signaler à la personne présidant la session.

# PROGRAMME

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**Thursday, the 30<sup>th</sup> of August 2007 – Jeudi 30 Août 2007****General planning / Organisation générale de la journée**

<b>Time / Horaires</b>	<b>Place</b>	<b>Activity / Activité</b>
from 9.00 am on / à partir de 9.00	Espace Vendôme	Registration / Inscription
10.00 – 12.00	room/salle: V116	Pre-conference S1 on Science Shops – boutiques de sciences (TRAMS) : Caspar de Bok, Henk Mulder
12.00 – 13.30		Lunch / Déjeuner
13.30 – 15.30	room/salle: V116	Pre-conference S2 on Science Shops – boutiques de sciences (TRAMS): Caspar de Bok, Henk Mulder
15.30 – 16.00	Espace Vendôme	Coffee break
16.00 – 17.00	room/salle: V116	Introduction to EC policy on Science Shops / Introduction à la politique européenne des boutiques de sciences: Monica Menapace, European Commission, Unit Science in Society
from 17.00 on à partir de 17.00		Posters can be put / Installation des posters
17.00 – 18.00	Salle Vendôme	Instructions for chairpersons - Introduction pour des responsables d'ateliers : Jean-Pierre de Grève
18.00 – 19.30	Amphithéâtre Poincaré/ Elie de Beaumont (L108/L118)	Inauguration Plenary – Plénière d'ouverture
19.30 – 20.45	Espace Vendôme	Drinks Reception / Cocktail

## Pre-conference on Science Shops – Pré-conférence sur les boutiques de sciences

Room: V116

10.00	Welcome/ Introduction by Caspar de Bok, University of Utrecht, The Netherlands, co-ordinator of the TRAMS-project
10.10	General introduction of the Science Shop model, history, organisational structures, the mediation process and working with students in the curriculum - Introduction générale du modèle des boutiques de sciences, historique, modèles d'organisation, l'implication des étudiants et parcours universitaires. by Henk Mulder, University of Groningen, The Netherlands
11.10	Non-university based Science Shops – The Bonn example. Les boutiques de sciences hors universités – l'exemple du WiLaBonn by Norbert Steinhaus, Wissenschaftsladen Bonn, Germany
11.30	Examples: Science Shops Utrecht by Caspar de Bok
11.45	Examples: Science Shops Groningen by Henk Mulder
12.00	Lunch - Déjeuner
13.30	Examples: Science Shop Wageningen by Gerard Straver
13.50	Examples: Science Shop Tilburg by Iris Sliedrecht
14.10	Starting a Science Shop: working with university management, allies, finance; pitfalls for Science Shops – Comment établir une boutique de sciences : les liens avec les directions universitaires, les alliés, les finances, les problèmes . Examples and issues from recently started centres – Exemples et problèmes des boutiques récentes
14.30	Remaining Questions and Answers – Questions ouvertes Small group discussions on different elements (e.g. start-up, working with researchers, working with students, working in a broader knowledge transfer unit or outreach unit; all with a specific focus on regional contexts and required adaptations in way of working) – Discussions en petits groupes sur différents éléments (travail avec des chercheurs, des étudiants, transfert des savoirs, contextes régionaux, adaptation des processus de travail)
15.30	Coffee break - Pause
16.00	Short introduction on Living Knowledge Network – Introduction au réseau international des boutiques de sciences by Norbert Steinhaus, Wissenschaftsladen Bonn, or Caspar de Bok, University of Utrecht, followed by Introduction to EC Policy on Science Shops and similar institutions – Introduction à la politique des boutiques de sciences de la Commission Européenne by Monica Menapace, European Commission, Science in Society Unit
17.00	End

Organised as part of the TRAMS project (Training and Mentoring of Science Shops), financed by the European Commission in FP6/Science and Society Program under contract SAS6-013654.

Thursday, the 30<sup>th</sup> of August 2007 – Jeudi 30 Août 2007  
18.00 – 21.00

## Inauguration Plenary – Plénière d'ouverture

Amphithéâtre Poincaré/ Elie de Beaumont (L108/L118)

« The co-production of knowledge – partnerships between researchers  
and civil society for a more just world »

« La co-production des savoirs – des partenariats entre chercheurs et société  
civile pour un monde plus juste »

Chairing: **Caspar de Bok** from the International Science Shops Network (Réseau International des boutiques de sciences) and **Claudia Neubauer** from the Fondation Sciences Citoyennes

With

=> **Isabelle Stengers**, philosopher, Université Libre de Bruxelles, Belgium

=> **Marc Lipinski**, Vice-president of the Regional Government of Ile-de-France in charge of Higher Education, Research and Innovation

=> **Nicole Dewandre**, European Commission, DG Research, Head of Unit "Sustainable Development", Belgium

and with

**Christophe Bonneuil**, Vice-president of the Fondation Sciences Citoyennes

**Gisèle Yasmeen**, Vice-President of the Social Sciences and Humanities Research Council of Canada.

**The plenary will be followed by a cocktail served in the Espace Vendôme.**

**La plénière sera suivie d'un cocktail dans l'Espace Vendôme.**

**Friday/ Vendredi, 31 of August 2007****General planning – Organisation générale de la journée**

Time	Place	Activity
from 9.00 am on	Espace Vendôme	Registration / Inscription
9.00 – 11.00	rooms/ salles: V115, V106, V107, V107, L213, L224, L109	Session 1: six parallel sessions 1a - 1f
11.00 – 11.30	Espace Vendôme	Coffee break/ pause café
11.30 – 13.30	Espace Vendôme	Market place: poster session; two videos
13.30 – 14.45	Espace Vendôme and Terrasse	Lunch
14.45 – 16.00	Amphithéâtre L108/L118	Plenary / session plénière
16.00 – 16.30	Espace Vendôme	Coffee break/ pause café
16.30 – 18.30	rooms/ salles: V115, V106, V107, V107, L213, L224, L109	Session 2: six parallel sessions 2a - 2f

**Friday, the 31<sup>st</sup> of August – Vendredi, 31 août**  
**Parallel Session 1**  
from 9.00 to 11.00 am

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**1.a University engagement with communities – strategy***Stratégies pour la coopération entre institutions scientifiques et collectifs citoyens***Room / Salle : L109**Chairperson / Présidente de session : **Eileen Martin**, Science Shop Queens University of Belfast**Strategies for embedding Community Engagement activities in universities***Eileen MARTIN / Emma McKENNA*

Queen's University Belfast

Northern Ireland

Universities have a key role to play in creating a socially coherent, knowledge based society. Currently however, many international universities are undergoing a re-organisation which places an increasing emphasis on stronger university/industry relations. The aim of this workshop is to focus on university/community relations and how to ensure that these important relationships can be embedded in university structures and policy.

This workshop will begin with short presentations from 2-3 universities about their experiences of trying to embed community engagement activities at a strategic level within the university. It will cover both early stage preparatory work and later stage issues including how to draw up strategic objectives.

Strategic level embedding can help to consolidate and secure activities in the area of community engagement within the University and links these activities to other core objectives of the institution. This creates a context where NGOs can engage with universities in appropriate ways and where citizens can access knowledge and information resources of universities. It also encourages universities to examine their role as the holders of knowledge in society and encourages scientists to look at issues of public concern.

In recent years much university research has related to business, patents and economic strength, with research outcomes appearing to become increasingly linked to the requirements of the financial markets. In this session there will be a focus on the benefits to universities of community engagement activities, and on developing concepts, structures and tools which will enable universities to play a key role in building equitable and supportive research partnerships with civil society, sharing knowledge, resources and expertise and developing awareness within universities of issues of public concern.

We will consider the social, educational and policy contexts necessary to embed community research partnerships within universities. Outcomes will include practical tools to begin or further discussions about strategic buy-in within your university and a range of contacts to encourage further debate around this area of work.

*It is anticipated that this session will be informal and that there will be ample time for discussion.*

**Building capacity for University-Community Civic Engagement***Dilafroz WILLIAMS*

Portland State University

USA

Almost 15 years ago, with the help of the community, Portland State University (PSU) launched a significant initiative of comprehensive institutional transformation. PSU aligned its curricula, its undergraduate and graduate academic programs, its scholarship and research, and its collaborative community outreach to reflect its commitment to a newly-defined "urban" mission that placed student learning and student experience at the core of the educational enterprise. Located in the heart of downtown Portland, PSU has taken seriously its charge to be in and of the city and the metropolitan region. Its motto, Let Knowledge Serve the City, is visibly embossed on a sky bridge symbolically capturing its commitment to the communities of which it is a part. In Fall 2000, a new year-long series entitled "Great City: Great University" was sponsored by the Office of Academic Affairs to engage faculty and community partners alike in civic discourse by taking stock of our common purpose and what we aspire to become as a great city.

This paper will present cases of the community-university collaborations that have enhanced the

quality of livability of the city. Examples will be presented of student involvement in the community for academic enhancement that also results in service to the community such as environmental sustainability; building local food economy; addressing at-risk youth's development; and watershed stewardship; Principles for building capacity for strong university-community partnerships will also be discussed for sustainability and long-term commitments.

### **Strategies for institutionalizing CBPR in US Medical Schools**

*Syed M. AHMED*

Center for Healthy Communities – Medical College of Wisconsin  
U.S.A

This presentation describes the status of community-based participatory research (CBPR) at US academic medical institutions and outlines institutional and individual barriers preventing CBPR from becoming an integral part of academic institutions. It proposes both philosophical and practical strategies within the academic culture that acknowledge the value of community ideas and actively include the community when conducting research that affects them. It provides a framework for developing academics into successful CBPR researchers. It also highlights current national interest in public engagement in research.

### **Action research as a vehicle for academic activism : insights from the complexity studies**

*Marija KOVANDZIC*

School of Health Sciences – University of Liverpool  
United Kingdom

A wider call for academic activism is needed. This need is created by at least two sorts of problems. On one side, academia continues to be dominated by the reductionist/objectivist tradition where acts of research, intervention and evaluation are clearly delineated. As a result, we see the numerous bottlenecks in translating research findings into useful and meaningful interventions, as well as the top down direction of research and intervention agendas. On the other side, grass roots' activities very often lack the academic support and the conceptual insights that would broaden the understanding and the effects of the phenomena emerging.

Action research could offer an alternative to the existing gap between the scientific knowledge and communities of practice. In order to fulfil this promise, however, action research still has to gain wider academic credibility. One way towards this goal is the establishment of stronger theoretical arguments for its scientific validity and relevance.

This paper will argue that complexity theory can contribute to this goal by enhancing the theoretical base of action research methodologies. It will explain a set of complexity concepts in relation to the practice of action research in order to set the scene for two main arguments. The first is that a complexity discourse provides a conceptual framework for an holistic approach to creating and using the knowledge. The second is that complexity calls for an awareness of meaning and responsibility for our actions as acts within a network of complex adaptive systems where change in one part of the system reshapes the context for the others. The assumption is that complexity studies can reinforce the academic credibility of action research methodologies. This in turn, could facilitate movement of academic activism that can contribute to crossing the university/community, global/local and other top/down divides.

## 1.b Mobilising knowledge for ecology

*Mobiliser le savoir pour l'écologie*

Room / Salle : V106

Chairperson / Président de session : **Sosser Brodersen**, Science Shop Technical University of Copenhagen

### Knowledge production in community based research within environment

*Sosser BRODERSEN / Michael SOGAARD JORGENSEN*

Technical University of Copenhagen  
Denmark

Many projects and activities within Science Shops, NGOs and community-based organisations, and community-based research are focusing on the environmental problems and their mitigation and prevention. The focus of activities includes

- documentation of problems experienced by citizens (noise, water pollution etc.),
- developing knowledge about problems and their sources and societal causes (pollution from pesticides, traffic, wood fired stoves etc.),
- development and implementation of solutions, which may mitigate present or future problems or prevent future problems (traffic planning, organic food, Local Agenda 21 activities etc.).

There is need for a workshop, which create a dialogue among these different types of projects and focuses on their direct impact on the problems in focus and the wider societal impact on science and technology, democracy etc. and what these impacts seem to be based on.

### Green deliberation : Notes for Reflexive Ecology

*Ana DELGADO*

University of Barcelona  
Spain

This paper aims to address some theoretical and practical difficulties of green deliberative democracy that may arise when it is applied in policies of sustainable development.

In the 1990s the new discipline of agroecology was consolidated in the south of Spain. Agroecology later became public policy for knowledge production and management of agri-biodiversity. Rural movements and NGOs in Spain are using it, and it has been exported and adopted by Latin American governments and rural movements, for instance in Brazil.

This version of agroecology involves a strong epistemological critique of modern science for producing knowledge in ways that exclude citizens. In its alternative version of knowledge production, agroecology underlines that science is political. Therefore, agroecologists should proceed by participative methodologies in order to include a greater plurality of views in decision making: they should produce "science with citizens".

Through my work as an agroecologist I have experienced that practical difficulties may arise when trying to apply this approach to concrete situations of knowledge production. Among other things, these difficulties have to do with a lack of agreement regarding where to place the borders between experts and non-experts in agroecology: Whose knowledge should count as expertise? May we all become experts? According to whose criteria should expertise be defined? What advantages do ideals of deliberation bring to local populations? What to do when people expect from experts effective solutions rather than long processes of deliberation? What to do when either ecology or deliberation crash with the local ideas of nature or the local political culture? What to do when citizens choose not to participate when urgent decisions have to be made? And how to proceed if the result of a participative decision-making is not sustainable? Should we in any case act as green dictators? What do we mean by science with people?

Taking as a point of departure some practical experiences, I will argue that difficulties arise in part because we (agroecologists) have supported the idea of an "extended peer community", without much reflection upon how to situate it, and, (ironically) without previous discussion with the local communities.

We tend to assume that people want to share responsibility with experts in research, but what do citizens really think about exercising citizenship in knowledge production? In this sense, my contribution aims to explore Martin Hajer's (2003) idea of policy as a political space. New values or conflicts that were not taken into account by the researcher/s may emerge during the implementation of the policy. I propose that those outcomes may be used as a point of departure for the next decision-making process. Second, the design of the policy may itself be an issue for deliberation, including a deliberation about the establishment of the borders between experts and non-experts. Third, as experts in (agro) ecology we should develop a reflexive view on the value and utility of our knowledge along two lines. First, we should reflect upon the scope and limitations of our knowledge and methods; second, we should critically assess the utility and value of our knowledge in local contexts.

### **Mobilising community science in Australia (ecological diversity)**

*Jason ALEXANDRA*

Earthwatch Institute  
Australia

Community science is alive and well in Australia contributing to significant scientific advances in a large, sparsely populated continent with significant ecological diversity. The Australian Meteorological Observation Network and the Australian Bird Atlases involve thousands of volunteer observers. Across the continent people are undertaking community science and gaining an understanding of the environment by measuring weeds or whales, dolphins and dung beetles. I have estimated that 300,000 volunteers regularly participate in environmental monitoring programs like Frogwatch, Saltwatch, and Streamwatch demonstrating a rich third sector science. The movement's importance, strength, and diversity of this continue to grow, since I documented it in "Listening to the Land - the first Directory of Community Environmental Monitoring" (1996). Government agencies now routinely recognise and support the valuable work of the community. However, further mobilisation and coordination of citizen or community science represents a major opportunity. There is massive community willingness to engage in science but only limited resources devoted to the coordination and support necessary for scientifically robust environmental assessments, including of climate change impacts.

Earthwatch Australia is an established NGO with 35 years experience of organising volunteer participation in peer reviewed research projects. It is developing a systematic program of research capable of utilising both community and expert input to determine the impacts of climate change on Australia's unique biota.

The paper will present information on the systems being developed collaboratively in Australia, by NGO's and scientist agencies that will support peoples' greater involvement.

Our current understanding of the impacts of climate change on species and ecosystem is limited, so methods for engaging the public in data collection will be trialled. Original and novel approaches to involving citizens in the challenges of natural systems science will be explored. Coordinated national systems for linking dispersed observer networks with national datasets and ecological researchers will be developed. This will result in advances in community involvement in systematic ecosystem assessment and research. It will allow a wide range of researchers to work and run experiments which involve people and networks in specific regions or involved with specific issues – eg weed and feral animal control, surveillance for new incursions of invasive species, changes in distribution, range or abundance of species of interest, assessing biotic response to climatic events, other triggers or climate change etc.

Citizen science has potential to accumulate ecological data across unprecedented scales and with considerable economy. New approaches to data gathering, ground truthing, trend assessment and model testing across enormous scales are possible.

The explicitly social processes of involvement in the observations of nature and their use for larger systems of data collection have numerous benefits derived from the "democratisation" of science. Dispersed observer networks have the potential to generate information relevant to terrestrial ecosystem research and management at scales and over timescales that conventional research projects can not easily achieve. This ability makes them excellent candidate tools for monitoring regional and national patterns such as those caused by climate change.

Furthermore, by using the public (schools, community, farmers and organisations etc) networks can play an important role in education and natural resources management, thus increasing overall societal capacity to

understand, manage and respond to change.

Changes in human relationships with country manifest in the physical landscapes in many ways. At the beginning of the 21 century, profound changes are occurring. Sustainable natural resource management demands major cultural, structural and technological change. In Australia there is a pressing need to learn land literacy, from systematic, strategic and repeated observations of nature, in order to collectively become better adaptive managers. Community science and knowledge generation will play an important role.

### **When urban ecology meets neighbours**

*Katharina SCHLIERF, Alejandra BONI, Félix J. LOZANO*

Technical University of Valencia

Spain

Urban ecology is not only about the ecological footprint, contamination, traffic congestion or CO<sub>2</sub> production. Social and psychological aspects are as relevant as the technical ones. The promotion of urban ecology requires therefore approaches that are able to combine the search for technical solutions with social dynamics that respond to the local context. Community based research seems an especially appropriate way of doing research in this field. It can contribute to create the necessary social support for technical or planning proposals, as well as it responds to the need for local adaption of technical solutions in order to make them viable.

The university-facilitated community based research initiative Taller de Barrios seeks to elaborate solutions for urban ecology in the district Velluters in the historic city center of Valencia. It follows a collaborative action-research approach, working together with the neighbourhood association and other neighbours.

The problems the district is affected by -speculation, traffic overload, lack of green zones and lack of social participation, apart from more generic problems that affect the city of Valencia as a whole such as deficient urban waste management- are closely related to urban ecology. Nevertheless, the barriers for approaches that would seek solutions from an urban ecology viewpoint are manifold and of the political, economic and social kind. Also neighbours show in first place more interest in other questions than ecology, when they are asked which kind of changes they would desire for their district. This requires first of all to analyze where urban ecology meets the neighbours' interests and on that basis to find a common ground for collaborative research and action.

The Taller de Barrios has applied during its one and a half years of existence a variety of methods based on participation in order to do these first steps. We will present and discuss in this presentation this experience. Special emphasis is put on the search for appropriate methods to make possible real and broad participation, as well as on the role of university in the collaborative research process.

### **Environmental movement and the nuclear establishment in Sweden**

*Charly HULTEN*

MILKAS

Norway

The relationship between the environmental movement and the nuclear establishment in Sweden has always been adversarial. The relationship between the nuclear industry and the nuclear regulatory authorities is, by contrast, very close. The reasons are several, some historical, some current. One distinctly polarizing factor was the national referendum on nuclear energy held in 1980. A complicating factor in Sweden is that environmental protection authorities (EPA) have neither knowledge of, nor authority over, nuclear matters; these are the sole province of radiation protection and reactor safety authorities. Whether nuclear technology is/should be subject to the Swedish Environmental Code and the environmental courts is hotly contested. Responsibility for storage of radioactive waste from Swedish installations has been entrusted to the industry itself. All these factors have serious impacts on the two cases treated in our paper; one international, the other national: 1) work to put the continuing radiological pollution of the Baltic Sea on the environmental agenda in the region and to bring about a ban on siting nuclear installations on Baltic shores; and 2) the participation of the environmental movement in the planning of a Swedish nuclear waste storage facility, as required by the Environmental Code. Among other things, the paper highlights how difficult it is to maintain academic independence and a critical scientific voice in small countries.

**1.c Intérêt de la sélection participative pour les agricultures européennes**  
*The Interest of participatory plant breeding for European agricultures*

*Session organized by Réseau Semences Paysannes*

**Room / Salle : L213**

Chairperson / Président de session : **Guy Kastler**, Réseau Semences Paysannes

**Introduction générale à l'atelier – general introduction to the session**

La sélection participative, si elle est très développée dans le monde, est restée pendant longtemps inconnue dans les pays occidentaux. Mais ces dernières années, des expériences se développent en vue d'une sélection à la ferme pour répondre aux besoins de modes de production biologiques ou autonomes ainsi qu'à des modes de transformation et de commercialisation artisanaux et de proximité. De nouvelles méthodes de recherche participative sont ainsi à construire, alliant expériences paysannes et savoirs scientifiques. L'enjeu est de mobiliser des chercheurs de disciplines variées sur ces thématiques nouvelles, et de réapprendre à travailler à l'échelle de la plante, de la ferme et de l'agriculteur.

Participatory plant breeding, even if very much developed in countries all over the world, remained for a long time unknown in the Western countries. But these last years, experiences are emerging concerning participatory plant breeding at farms in order to meet the needs for modes of organic and autonomous production as well as modes of artisanal transformation and marketing, and proximity. New methods of participatory research are thus to be build, combining experiences of farmers with scientific knowledge. The stake is to mobilize researchers of different disciplines on these new sets of themes, and to re-learn to work at the scale of the plant, the farm and the farmer.

**Présentation des travaux de sélections paysannes et participatives en France**

*Guy KASTLER*

Réseau Semences Paysannes

France

**La sélection participative du maïs au Brésil**

*Altaír TOLEDO/ Adriano CANCI*

Embrapa/ CPAC

Brazil

**L'agriculture biologique et la sélection participative en France**

*Véronique CHABLE*

INRA

France

**Produce and validate knowledge for a greater alimentary sovereignty:  
participatory plant breeding**

*Michel PIMBERT*

IIED

UK

**La gestion dynamique de la biodiversité à la ferme, une forme de sélection  
participative ?**

*Isabelle GOLDRINGER*

INRA  
France

**Le programme de sélection participative de maïs réalisée par Bio d'aquitaine**

*Patrice GAUDIN*

Adap Bio  
France

**Quel cadre conceptuel pour la sélection participative ? Adaptation locale et adaptation par plasticité, un concept commun pour étudier l'adaptation**

*Sylvie POUTEAU*

INRA  
France

**1.d Participatory processes in science and technology***Processus participatifs en science et technologie*

Room / Salle : L108/L118

Chairperson / Président de session : **Thomas Auf der Heyde**, University of Johannesburg**Reframing Community Based Research : Critical Issues and New Directions***Brenda ROCHE, Rick BLICKSTEAD*The Wellesley Institute  
Canada

The Wellesley Institute is a Toronto-based organization that works to advance the social determinants of health through rigorous community-based research, reciprocal capacity building and policy analysis. Through our community-based research (CBR) program we seek to explore the impact of social and economic disadvantages on the health of marginalised communities. A critical part of this work has been the promotion of partnerships and collaborations among community and academic partners. The framework of CBR can offer real value in giving voice to communities often overlooked in conventional academic research. Moreover, for academics CBR enhances the conceptual authenticity of their work, allowing it to be shaped by and located within the communities they work with. However this work is also fraught with challenges.

As CBR is increasingly framed as a particular mode of conducting research there is a need to question the assumptions that may underlie this work. In this paper we trace some of the critical issues that are (re)emerging in CBR research including: definitions and representations of need within communities; power differentials between CBR partners; methodologies of CBR; notions of 'evidence' in research; and new directions for CBR as a catalyst to inform social policy and practice on a broader scale. Illustrative data from the CBR program at the Wellesley Institute will be used to highlight ongoing debates, best practices, and lessons learned.

**Equal Exchange : is Money Enough ? Investigating new strategies of users' incentives***Yan-Ki LEE*Helen Hamlyn Center – Royal College of Art of London  
United Kingdom

In recent years, user research has become an important part of the design process, with the emergence of methodologies such as inclusive design, universal design, consensus design and participatory design. Also, with legislation and policy developments, user involvement has become an essential element in design (BSI British Standard BS 7000-6). Discussions regarding forms of incentives are taking place in different research areas. For example, in studies of Bioethics, scientists have been asking how much subjects should be paid to participate in research (Latterman and Merz, 2001). For consumer researchers, there are some basic cash incentive formulas. In the USA, for example, people are paid \$0.75 for every minute spent doing general consumer research and \$1.00 per minute for one-on-one interviews (Kuniavsky, 2003). The aim of this workshop is to foster exchange of experience on user involvement in the design research process.

This workshop is a part of prototype testing of the new research tool, Incentive, which is designed to be played in a workshop situation with researchers from different background. During this workshop, this new game will be used as a research tool for generating discussions on forms of incentives and implementation methods. Incentive is a game designed to understand designer-user relationship in design researches and has been introduced to different research communities. It represents and tests the co-generative approach, which is based on understanding user research as a 'meaning-construction' process between users and design-researchers. Four types of user incentives practices are defined between the dimensions of 'users' and 'designers': innovation (designer - driven), collaboration (designer - focused), emancipation (user - focused), motivation (user-driven). The act of playing helps participants to rethink their user research practices and encourages an alternative to cash-only incentive practice. The findings will be part of the research project that aims to encourage designers and researchers to rethink the role of active users in user research practice, and to suggest the change of researchers/designers' role as experts to facilitators and share.

**Atmospheres in the making - The co-production of science and citizenship***Atmosphères en construction – la co-production des sciences et de la citoyenneté***Morgan MEYER**

University of Sheffield

United Kingdom

This paper explores how science and citizenship is co-produced and the very means of this co-production. First, we discuss the term 'co-production', a term used to describe very different processes: the co-production of science and society; of technology and society; of (professional and lay) knowledge; etc. What do we mean by co-production? Who co-produces? And what is being co-produced?

Then, we will analyse the relationships between scientists and citizens by focussing on the 'technologies of co-production', devices that aim to foster a better dialogue between scientists and citizens (i.e. surveys, consensus conferences, etc.). We will do so by drawing upon a specific case-study: the co-production of knowledge on air quality in Sheffield, England.

In order to produce what some might see as 'pure', 'hard' or 'cold' scientific facts, a lot of 'soft' tinkering is needed. Dialogic spaces are required - so to say 'warm' spaces - where people can trust each other, where they can express themselves, where they can speak about their experiences, emotions and values. We will thus argue that the co-production of science and citizenship is reliant on techniques and forums which enable the co-production of trust and which do not disallow subjectivities.

Co-production can only take place within 'atmospheres of democracy', that is, temporary, flexible, and participative arrangements in which multiple societal actors co-construct knowledge and in which mutual learning can take place. These atmospheres cannot solidify, than cannot settle down; they are provisional bricolages, in which representation is always potentially in crises and has to be constantly improved and adjusted.

Finally, the term 'co-production' should not preclude a discussion about the depth of participation, since not all forms of participation are equally democratic. We also have to consider the temporal aspects of co-production. From what stage on are citizens involved in co-producing science - research design, research questions, method development, data gathering?

While the concept of co-production offers a useful approach to analyse the interrelationships between science and society - and allows for a more symmetric reading between both -, we still need to carefully examine how, when, and where this co-production actually takes place.

***Atmosphères en construction – la co-production des sciences et de la citoyenneté***

Cette communication examine comment les sciences et la citoyenneté sont co-produits et les moyens de cette co-production. D'abord, nous discuterons de la notion de 'co-production', un terme qui est employé pour décrire des processus très différents : la co-production de la science et de la société ; de la technologie et de la société ; des savoirs professionnels et profanes ; etc. Qu'entendons-nous par co-production ? Qui co-produit ? Et qu'est ce qui est co-produit ?

Puis, nous analyserons les relations entre scientifiques et citoyens en nous concentrant sur les 'technologies de la co-production', les dispositifs qui visent à favoriser un meilleur dialogue entre les scientifiques et les citoyens (c.-à-d. études, conférences citoyennes, etc.). Nous utiliserons un cas d'étude spécifique, notamment la co-production de la science sur la qualité de l'air à Sheffield en Angleterre, pour illustrer nos propos.

Afin de produire ce que certains verront comme des faits scientifiques 'purs', 'durs', ou 'froids', beaucoup de bricolage 'doux' est nécessaire. Des espaces dialogiques sont nécessaires – des espaces 'chauds' pour ainsi dire - où les gens peuvent se faire confiance, où ils ou elles peuvent s'exprimer, où ils ou elles peuvent parler au sujet de leurs expériences, leurs émotions et leurs valeurs. Nous allons donc argumenter que la co-production des sciences et de la citoyenneté est dépendante de techniques et de forums qui permettent la co-production de confiance et qui ne rejettent pas les subjectivités.

La co-production ne peut avoir lieu que dans des 'atmosphères de démocratie', c'est-à-dire des arrangements provisoires, flexibles et participatifs dans lesquels de multiples acteurs sociaux peuvent co-

construire des savoirs et dans lequel un apprentissage mutuel peut avoir lieu. Ces atmosphères ne peuvent pas se solidifier, elles ne peuvent pas se fixer ; ce sont des bricolages temporaires, dans lesquels la représentation est toujours potentiellement en crise et doit être constamment améliorée et ajustée.

Finalement, le terme de 'co-production' ne doit pas exclure une discussion au sujet de la profondeur de la participation, puisque pas toutes les formes de participation sont également démocratiques. Les aspects temporels de la co-production doivent également être pris en compte. A partir de quelle étape est-ce que les citoyens sont impliqués dans la co-production de la science - protocole expérimental, questions de recherche, développement de la méthode, collection de données ?

Tandis que le concept de co-production offre une approche utile pour analyser les relations entre la science et la société - et permet une lecture plus symétrique entre les deux -, il nous faut toutefois examiner soigneusement comment, quand, et où cette co-production a lieu.

### **Politicians and researchers : the right climate for dialogue ?**

*Camilla MODEER*

Vetenskap & Allmänhet - Stockholm  
Sweden

In Sweden as in many other European countries there is currently a debate into whether and to what extent to introduce participatory processes into political life. As a contribution to the debate, the Swedish organisation Vetenskap & Allmänhet, VA (Public and Science) has carried out an extensive study mapping politicians' existing attitudes to science and researchers.

Two out of three politicians claim they use scientific research information to support political decisions. But paradoxically they seldom look for research information within the areas they believe to be most influential.

The study shows that politicians have great trust in the potential of science and research. 86% of politicians believe that medical research has a great influence on the development of society. This is followed by technology and natural sciences (72%). However, for humanities and social sciences the figure is only 39%. According to most politicians, the policy areas most influenced by research results are health, the environment and energy.

However, when asked what type of research information they make use of, only 16% of politicians say they often make use of medical research results, with the percentage increasing to 21% for technology and natural sciences and to 33% for social sciences and the humanities.

One positive finding is that almost all politicians have great trust in researchers, as do the majority of the public. Many politicians believe that there is a good chance that research will help to increase economic growth, slow down climate change and solve a number of other problems. Other studies have shown that the majority of the public think that scientific knowledge is crucial to the development of society. This shows there is a good foundation for positive dialogue within Swedish society, but society needs to ask itself whether scientific knowledge is being used to its full potential.

The findings also point to the fact that politicians and researchers speak different languages, have different perspectives and meet far too rarely. Researchers for their part cannot understand why politicians take so many other (non-scientific) aspects into account when making decisions, whereas politicians see scientific knowledge as just one source amongst many. Other VA-studies of different groups show that there is a large gap between the scientific community and the rest of the society. It is clear that politicians, as well as other groups such as teachers, journalists and the general public, need new ways of interacting with researchers and new meeting places. From international surveys it is clear that the Swedish studies are very much in line with what has been found in other countries. The conclusions drawn are also very similar in all cases - namely that there is a need for new ways of interacting in almost all countries. Perhaps this is a gap that can be filled at least in part by participatory processes in the future.

**Science et démocratie : la nécessaire complémentarité des approches****« top down » et « bottom up »***Democracy and science : top down and bottom up approaches must be complementary*

Janine GUESPIN-MICHEL

Espace Marx

France

Si la politique de la recherche d'aujourd'hui prépare la société de demain, alors la politique de la recherche est bien un problème pour toute la société. Les principes démocratiques veulent que la société dans son ensemble s'en empare. La nature particulière de la recherche rend nécessaire que les travailleurs scientifiques s'en mêlent en tant que tels. Mais est-ce possible ?

Il existe deux manières de tendre vers cet objectif. L'une, amplement illustrée dans cette conférence est l'approche dite 'bottom up'. Partir d'expériences de terrain, de coopérations sur des sujets de société entre scientifiques et citoyens. L'autre est l'approche 'top down', qui consiste à respecter un cadre théorique général, (ici la nécessité du dialogue entre scientifiques et citoyens à un niveau global), ce qui conduit à tenter d'organiser le débat et la prise de décision démocratique à tous les niveaux.. Opposer ces deux méthodes, ou en privilégier une seule, c'est aller à l'échec dès lors qu'on poursuit un objectif global, par exemple agir sur le pilotage de la recherche au niveau d'un état, ou de l'Europe. Nous l'illustrerons sur deux exemples.

D'où l'idée d'approche appelée parfois 'middle out', basée sur les interactions entre les niveaux de réalités. Du niveau local peut émerger le niveau global, mais pas dans n'importe quelles conditions. Le système doit répondre à de multiples contraintes. Les unes (illustrées dans cette conférence) dépendent de la nature des constituants (locaux) et de leurs interactions. Mais d'autres dépendent du niveau global, (structures de pouvoir et des institutions, rapports de forces, organisations de type politique ou syndical) et doivent être prises en compte et mises en œuvre.

**Democracy and science :****Top down and bottom up approaches must be complementary**

If it is true that today's policy of science prepares tomorrow's society, then, research policy is an area which concerns the whole society. Democratic principles make it necessary that the whole society be involved in it. At the same time, the specificity of scientific research requires that scientific workers play also a specific role in determining scientific priorities. Is this possible?

Reconciling these two logics can be done in two ways. One, which is the main topic of the present meeting, is the so called 'bottom up approach'. One starts from local experience, 'from the field', for instance, through cooperations on topics related to societal problems between a few scientists and citizens. The other one is the 'top-down approach, where one starts from a general theoretical frame, (for instance the idea that a dialogue between scientists and citizens at large is a prerequisite to any success in democracy in the area of science policy), and then one seeks to organize scientific debates and democratic decisions at all levels. To oppose these two approaches, or to put too much emphasis on only one of them, is leading to failure as soon as the target is somewhat global such as national or European science policy. I shall illustrate this by two examples.

This needed interaction between different levels has been sometimes termed 'middle out approach'. The "global" can emerge from the "local" but not in any circumstances or conditions. We can view this as a system in which many constraints are at work.

Some (discussed mainly in this meeting) come from the local levels and their interactions. But others arise directly at the global level (structure of power and institutions, power balance, political organisations or trade unions), and must also be taken into account.

**1.e User led innovation and information, and Communication Technologies***Innovation par les usagers et technologies de l'information et de la communication***Room / Salle : L224**Chairperson / Président de session : **Jean-Pierre de Grève**, Science Shop – Free University of Brussels**The Mikropolis Model : Towards a transdisciplinary approach for the development of Information and Communication technologies***Joao Porto de Albuquerque*University of Hamburg  
Germany

Today's implications of Information and Communication Technologies (ICTs) span the most different areas of human activity: from the global to the individual levels of social interaction. As such, ICT development entails big societal, ethical and moral challenges as an inextricable part of its innovation process. In order to properly deal with such challenges, there is an urgent need for approaches that support a Constructive Technology Assessment with analytical instruments to provide a broad perspective of the socio-technical interplay between ICT development and use.

In the pursuit of this goal, we will report in this talk about experiences in building the Mikropolis Platform, a transdisciplinary approach developed in the University of Hamburg to support participative and sustainable research on ICT design and use. A central focus of our approach is the construction of a common conceptual platform that enables the communication and articulation of perspectives from practitioners in ICT use contexts and researchers with multiple disciplinary backgrounds, thus aiming at achieving a transdisciplinary view of phenomena that transposes disciplinary boundaries.

The Mikropolis platform offers a socio-technical structural perspective of the ICT development, which is integrated into the micro-context of the relations between ICT producers and consumers. These two perspectives are also contrasted against the backdrop of the globalised society in the macro-context, and they are put into a historical perspective by means of paths of technological use. The platform thus affords a better understanding of the relations and dependencies among those different perspectives, thereby enabling one to apprehend how complex and multifaceted the transformation process is that results from the interplay among ICT, organisations, individuals, and social actors in a globalised world.

In this manner, Mikropolis enables the consideration of socio-technical aspects to complement technical and economical viewpoints in the development of ICTs, offering a valuable resource towards a participative and sustainable technological development.

**Les logiques participatives de Wikipedia***Dominique CARDON**Laboratoire SENSE, France Télécom R&D  
France*

Dans cette communication, on se propose d'étudier les logiques de l'écriture collaborative de Wikipédia, à partir des résultats des recherches développées dans le projet ANR/RNRT Autograph (<http://overcrowded.anoptique.org/PagePrincipale>) qui s'attache à explorer les formes d'auto-organisation dans les grands réseaux d'interactions. Wikipédia constitue en effet un cas exemplaire de projet collaboratif organisé sur la base d'une ouverture complète de l'écriture et d'un contrôle éditorial exercé a posteriori par l'ensemble des participants. Elle constitue à cet égard une forme originale d'organisation collective facilitant l'ouverture, la participation et la co-production du savoir. Il est cependant nécessaire de confronter les idéaux participatifs mis en avant par les promoteurs du projet Wikipédia et la réalité des pratiques d'écritures coopératives des participants. À partir d'une analyse statistique des contributions et du profil des contributeurs, on se propose de montrer l'extrême diversité des modes d'engagement dans la construction de l'encyclopédie. Une des particularités des nouvelles formes de coopération sur internet est de faciliter des coopérations "faibles" entre individus disposant de profils, de compétence et d'intérêt extrêmement hétérogènes.

Car si la production des articles de l'encyclopédie est distribuée sur Wikipédia, la surveillance et la veille des modifications apportées aux articles fait aussi l'objet d'une organisation coopérative et distribuée.

Or, les populations qui sont amenées à produire du savoir et celles qui prennent en charge la surveillance de ce bien collectif que constitue Wikipédia ne sont pas exactement les memes et s'engagent différemment dans le projet. Aussi, à partir de cette étude de cas, on s'interrogera sur le développement du paradigme de la "force des liens faibles" qui est aujourd'hui au cœur des nouvelles formes d'innovations sur Internet, souvent désigné par l'étiquette "Web 2.0".

### **Citizen innovation : using participatory research for knowledge discovery**

*Darren SHARP*

Swinburne University of Technology, Melbourne  
Australia

Open source software (Mozilla), virtual worlds (Second Life) and media-sharing services (YouTube) have pioneered new modes of participatory cultural production that unsettle established boundaries of producer/consumer relations. Today's citizens have much greater input into the creation and dissemination of the products and services they consume. It is already the case that user-generated content in the form of blogs, wikis, citizen journalism and mashups pose a challenge to mainstream media's monopoly role in the production, packaging and distribution of cultural content. Such communities provide researchers with a valuable base from which to engage in new methods of participatory knowledge discovery.

World-leading companies like Procter & Gamble, the BBC and Lego have pioneered the co-creation of products, services and content through open innovation business models. Eric von Hippel (2005), Professor of Management and Innovation at MIT has explored these practices through his notion of "user-centred innovation". His research findings reveal that "lead users", both firms and individual consumers, are at the leading edge of the market and develop novel products with wider customer appeal. These user-centred innovation processes bring benefits in terms of commercialisation opportunities and new forms of community engagement.

Trends in user-generated content, peer production communities and socially networked businesses provide new frameworks for thinking strategically about knowledge production in the 21st century. Traditional social science frameworks face the challenge of moving beyond discursive formulations of theory to encompass the 'participatory-turn' inherent in the new cultural formations under examination. This presentation will discuss how user-led innovation provides new concepts and methods capable of extending the field of knowledge about participatory research. It will also explore pathways for organisations to leverage the participation of their audiences, customers and citizens in the interest of co-creating new forms of knowledge and culture.

### **Blogging for beginners : people with intellectual disabilities and the web**

*Alex McCLIMENS*

Centre for Health & Social Care Research, Sheffield Hallam University  
United Kingdom

Computer mediated technologies offer possibilities for inclusion, engagement and contribution to public debate to anyone with access to the internet. Here the more recent emphasis on user generated content (web 2.0) has shifted the emphasis away from monolithic providers towards a more varied and democratic attitude to web involvement.

Current research in Sheffield is using the emergent technologies of blogs and podcasts to enable individuals labelled with learning disability (aka mental retardation or intellectual disability) to participate in web-based fora.

Supported by a group of inter-professional university students the research participants are discovering the possibilities of mass communication. The project is presently at the half-way stage but already it is clear that the knowledge that emerges is of a different order: individuals who were formerly silent on issues that affected their lives now have a platform by which to address an audience. The potentials of the web, in this instance the use of blogs to publicise the private, look set to continue the traditions of narrative knowing in the twenty first century.

## 1.f Science-citizens partnerships for health and social justice *Partenariats science-citoyens pour la santé et la justice sociale*

Room / Salle : V107

Chairperson / Président de session : **Peter Levesque**, Knowledge Mobilization Works !

### University and Community Partnerships to Promote Health Communication and Cancer Screening

*Maghboeba MOSAVEL, Nadia EL – SHAARAWI, Lydia HILL, Marcia JOHNSON*

*Presentation by : Maghboeba MOSAVEL*

Center for Reducing Health Disparities, MetroHealth Medical Center, Case Western Reserve University, USA

Working together, university researchers, community service providers and community members can conduct innovative research to address local problems. The Mother Daughter Health Collaborative (MDHC) is a community-academic partnership dedicated to addressing disparities in cervical cancer screening and outcomes among African American mothers and daughters in low income, urban communities. While rates of breast and cervical cancer are generally declining, incidence and mortality rates remain disproportionately high among women of ethnic minorities.

The MDHC is a result of participatory research collaboration between a university, a government health department, civil society organizations, and community members. Our community-based research project, using participatory research principles, identified the mother-daughter relationship as a potential locus for health promotion, and further documented the need for public health practice to consider the bidirectional flow of health information between generations of women. The research results were subsequently developed into a knowledge-building curriculum that is informed by local needs. This curriculum builds on the existing social communication between mothers and daughters as a means for health information sharing. A second focus of the curriculum is to increase accessibility of cancer screening technology through the mastery of knowledge about health, cancer, and medicine. Innovative partnerships that build on community assets to promote disease prevention and health communication have the ability to improve health status in communities that have not been reached by traditional public health interventions.

### A Community's Engaged Response to Integrated Health and Social Services for Disadvantaged People

*Katharina KOVACS BURNS*

University of Alberta

Canada

Two key community service areas which often present with challenges for people with low income and those who are homeless are health and social support services. Disadvantaged people are often socially excluded. It is necessary to address the challenges and barriers within the community and to make social inclusion the priority so that disadvantaged individuals and families can access the services they need. However, such communities need the partnership with universities to assist with the information-gathering process. The purpose of a study in one community in Edmonton, Alberta was to engage the university academics, community service providers, disadvantaged people and decision makers to :

- (a) determine from all community and other stakeholders what works and does not work in the community for low income people to access health and social supports,
- (b) discuss the appropriateness of an integrated community service delivery approach utilizing navigation case management to assist disadvantaged individuals and families; and
- (c) design or develop an approach that will work in the short term and for the future.

Community Based Participatory Research was utilized with a Community Advisory Committee of various stakeholders including disadvantaged people, health and social support service providers, decision makers and academics.

A qualitative descriptive interpretive approach was agreed on to thematically analyze survey, interview and dialogue data. The perceptions of community stakeholders were summarized as to what, how, why, and to what extent the currently existing approach works or if a proposed integrated health and social services delivery approach would effectively meet the needs of disadvantaged people.

Participants identified benefits and challenges to a structured integrated health and social services approach for people who need individualized care and assistance to address multiple and complex needs. Service providers had mixed opinions about a structured collaboration approach. Clients thought otherwise. The challenge was coming to some consensus on what an appropriate service delivery approach or model looked like.

Communities need assistance with evaluating effectiveness and efficacy of service delivery, with community social capital enhancement, and with capacity development of service staff to actively participate in 'navigating' disadvantaged people. Service providers and decision makers need to support the concept of an integrated service delivery approach which can provide more appropriate health and social care for disadvantaged individuals and families. A community-university partnership provides the necessary guidance and facilitation for the necessary research including setting up the Advisory Committee, finding funding for the project, designing the study with the larger group, conducting the study, gathering and analyzing the data, and reporting the findings.

### **CBPR and Health : Expanding Social Justice and Community Health in the US South**

*Douglas TAYLOR*

Southeast Community Research Center  
U.S.A

The southeastern states rank in the bottom third of the US for all major health indicators. Complex social and political structures targeted against the working class and people of color obstruct communities in the region from taking steps to improve health. As with Hurricane Katrina, the south's disaster of bad health has roots in the region's politics, culture, economics, and anemic concern for human rights. The New Tools New Vision (NTNV) project, a collaboration among community-based organizations and Historically Black Colleges and Universities employs a community-based participatory approach to develop and implement holistic strategies to reduce health disparities in five sites across Georgia.

The first phase of the project has communities design pilot projects to build partnerships and identify specific health issues. Results of this phase will be used to develop new community-driven methods and approaches to designing and implementing policy initiatives in the next phase. Project elements address capacity building for researchers and community organizations, refining facets of CBPR suited to the South and communities of color, and providing a mechanism for community members to expand the meaning and scope of public health research ethics, specifically to address issues of environmental and health injustice, political exclusion and inequitable resource allocation.

This presentation will discuss lessons learned and successes and challenges of NTNV in the project's first two years. Particular focus will be on the creation of community-university partnerships, challenges of power sharing and democratic decision-making, and added pressures impeding such partnerships in the South's political and cultural environment.

### **Les membres de la communauté des comités d'éthique de la recherche : une voix pour la société civile ?**

*Florence PIRON*

Université Laval  
Canada

Dans l'infrastructure actuelle de l'éthique de la recherche au Canada, qui, depuis 1998, s'applique tant aux sciences biomédicales qu'aux sciences humaines et sociales, les comités d'éthique de la recherche occupent une place centrale. Institués au sein des universités ou des centres de recherche en santé, ils étudient et évaluent tous les projets de recherche impliquant des personnes.

Ces comités sont formés d'au moins 5 personnes, 4 experts et un "membre de la communauté" desservie par l'Université ou par l'établissement de recherche. C'est l'un des très rares lieux institutionnels au sein des établissements de recherche canadiens qui s'ouvrent aux citoyens "non-experts". Quel est le mandat de cette personne? Comment est-elle choisie? Quelle est sa marge de manoeuvre? Quelle est sa place au sein de la délibération collective du comité? Cette communication présentera les grandes lignes de cette problématique en s'appuyant sur une consultation menée à Québec et à Ottawa auprès de 20 membres de la communauté siégeant sur des CER.

### **Création d'une banque génétique dans le cadre du syndrome autistique : étude des tenants et aboutissants. Rôle clé de l'expertise collective**

*Martine FERGUSON, Gianfranco VALENT*

Autisme France  
France

Le syndrome autistique est une pathologie extrêmement complexe en augmentation constante et inquiétante dans les pays industrialisés depuis ces dernières décennies durant lesquelles les associations de parents n'ont eu de cesse d'exiger des professionnels une prise en charge adaptée et une capacité de recherche à la hauteur du problème. Les résistances conceptuelles et factuelles ont été énormes et le sont encore aujourd'hui à bien des égards.

Le projet de création d'une banque génétique porté par la Fondation Autisme est un premier élément concret d'un nouveau mode d'expression de la société civile vis à vis d'un problème complexe que les professionnels n'arrivent pas à eux seuls à résoudre de façon satisfaisante. Comme d'autres pathologies auxquelles on avait attribué dans un premier temps des causes simplistes, l'autisme s'avère aujourd'hui être un syndrome de plus en plus fréquent et extrêmement perturbant pour les chercheurs de part ses multiples causes parmi lesquelles celles liées à l'environnement (alimentation, toxicologie...) restent à l'écart des projets de recherche majoritairement axés sur la génétique pure et l'imagerie cérébrale sur la base d'un modèle strictement neuro-développemental.

Cet atelier peut se concevoir en deux parties.

Tout d'abord une présentation et une discussion à propos des raisons profondes qui sous-tendent ce projet, de la dynamique de son développement, des réactions (concurrence/coopération) des milieux professionnels (médicaux ou non) et associatifs concernés. En partant de ce cas précis seront mis en évidence les éléments conduisant à la nécessité d'un autre modèle de réflexion collective à propos de pathologies complexes.

Dans un deuxième temps seront donc abordés le problème de l'expertise et de la réflexion scientifique collective, préalables essentiels à toute recherche et préoccupation majeure des responsables associatifs en charge de la politique de recherche. Cette partie de la discussion portera sur comment la société civile peut se doter d'un modèle différent d'expertise collective et modifier les rapports classiques entre associations et équipes de recherche. Il s'agit d'une proposition de modèle de conseil scientifique à contre-pied des modèles classiques et utilisant une méthodologie d'aide à la coopération développée par l'Université de Technologie de Compiègne.

### **Design with older people. Exotic and at the same time familiar.**

*Liesbeth HUYBRECHTS*

Media and Design Academy, Catholic University of Leuven  
Belgium

Design does not only try to make life more beautiful but also particularly better. Basically all forms of design want to add something to or change something in the environment. Still we can make a difference between the more or the less innovative notions of what they want to add exactly. The more classical approaches emphasize merely functional and/or aesthetic design. Design then has to be as user-friendly, as pleasant or as nice as possible. The more innovative approaches of design, however, take it a step further. They integrate the environment, the political, social, economic or ecological context into their process of changing the environment.

Social and "transformational design" are two terms that sketch this rather "holistic" approach of design, which means that they take the specific context of the design into account. The term "experience

design” takes it another step further in our interpretation. With this term we not only underline the process of changing the environment, but also the change of man’s experience of the environment. In this way psychological or biological systems become involved in the design process as well.

Social problems and phenomena are complex, chaotic and often intangible. Therefore they call for a multidisciplinary approach. The design for the health sector, the ecological environment or the third world does not always take the form of a delineated product either. A designer traditionally chops a problem into pieces with an eye on small solutions that are tangible in the short term (Design Council, 2007). Moreover, designing for social problems is not always experienced as being very attractive. Also sectors for which designs are made, like the health sector in this case, do not seldom expect fast and tangible solutions. With short-term solutions we can quickly show off and score, but they do not necessarily lead to an integrated approach to complex problems.

In this case study we try to counter this short-term thinking by going through a research process together with a multidisciplinary team of older people, health care workers, designers, students and lecturers. Together we wish to learn what design can mean for the care of the elderly and vice versa. The students and lecturers of the Catholic School of Limburg (Media and Design Academy and Department of Public Health Care) therefore decided to address an always growing group that at the same time has been neglected by design in our society. In the project “Carefree Living in the care for the elderly” they asked the question how they could make the life of older people in the services for the elderly more “carefree” and maybe even more pleasant by using media. This case also surpasses the services for the elderly. We wish to underline the importance of social and experience design. Besides the already mentioned complexity of social problems, the term experience design emphasizes the complexity of the world of experience of the individual. Experimenting with new research approaches can make design more socially relevant and, conversely, make social, economic and artistic sectors more adapted to the world of experience for its target audience.

The ever changing technology is the tool of designers who wish to change the world. “We know what technology can do, but what is it for?”, John Tackara - director of the “design futures network. Doors of Perception” – asks. With technology we can build magical constructions which make barely visible things of society visible (Zielinski, 2006). In the “Alzheimer 100” project Thakara for example made the experiences of people suffering from Alzheimer visible through weblogs, videos or pictures. He and his team will translate this material into new products and services in the long run (Thakara, 2007). Technology, however, makes many people feel anxious and thus needs to be developed in close coherence with the current society in order to implement some real changes.

**Friday, the 31<sup>st</sup> of August**  
**Posters, Videos and Marketplace sessions**  
from 11.30 to 13.30

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We would like to present to you the Marketplace and Poster sessions as special places where participatory, open and facilitated discussions will take place. Poster and Marketplace presenters will share their work and engage in conversation with you or respond to any questions you might have about their work. Furthermore, there will also be space made available for participants who could not submit a proposal and would wish to present their work during these sessions within a 5 minutes (not more), allocated time-slot.

All participants of the conference are invited to bring any material about their organisations for display and dissemination.. Extra tables will be made available.

Khan Rahi from the Loka Institute/CRN & CCRN, US/Canada will be the facilitator for the Poster session and the Market place. Khan will be at the Registration Desk to provide you further information or respond to any questions you might have. For Marketplace presentations, please come to the Registration Desk to pick up the Guidelines.

## POSTERS

### **Taking it to The Streets: University Engagement and Community Change in River City**

*J. WILL*

University of North Florida  
USA

For over a Decade, the Center for Community Initiatives (CCI) at the University of North Florida has worked directly with community based groups, local non-profits and agencies, as well as government agencies, to improve the conditions facing the most disadvantaged members of our community. Through these collaborations, CCI has engaged dozens of students, staff and faculty in hands-on participatory research projects in the community. Most recently, over 60 UNF student volunteers participated in the Annual Homeless Census and Survey in Jacksonville, where they conducted interviews of homeless persons on the streets and in shelters to assess the conditions and needs facing this group. Other projects have included examining racial inequality in the community, evaluating programs for at risk youth, and assessing the impact of health delivery programs aimed at reducing infant mortality among minorities and HIV/AIDS prevention. In this paper, we discuss the collaboration between CCI and Fresh Ministries, INC, a Faith-Based non-profit Community Change organization located in Jacksonville Florida. As part of their i6-Point Plan,<sup>1</sup> Fresh Ministries approached CCI to conduct a needs and assets study of the East Jacksonville neighborhood ≠ an area of the city plagued with extreme poverty, high crime, and myriad social problems. Working with community groups, residents, clergy, and school officials, CCI used interviews, focus groups, a windshield survey,<sup>2</sup> and a large collection of available data from government and non-profit agencies to conduct the research. Findings from the needs and assets assessment are being used to develop targeted programs to improve the health, safety, and positive school outcomes in the neighborhood.

### **Vers une hypothèse du modèle de transition environnementale en Catalogne : le rôle des mouvements écologistes - Towards a hypothesis on the environmental transition in Catalonia: the role of the environmental movement**

*Angels ALIO, Gerard JORI*

University of Barcelona  
Spain

À la suite de notre intérêt pour l'incidence de la société sur les phénomènes environnementaux, dans le contexte des activités du Group de Géographes pour l'Écologie Sociale (Université de Barcelone) nous

avons réalisé dans les dernières années un inventaire de mouvements citoyens de genre écologiste apparus en Catalogne depuis la décennie des soixante-dix. Actuellement, ce travail se trouve dans une phase suffisamment développée, et c'est pour cela que nous pouvons extraire quelques conclusions à propos de l'influence que le mouvement associatif puisse avoir dans le processus de transition vers le paradigme du développement durable. Aux effets de cette contribution à la Troisième Conférence Living Knowledge nous prévoyons examiner, premièrement, les transformations qui ont expérimentées les mouvements dès 1970 jusqu'à nos jours, et en deuxième lieu, la différenciation thématique de ceux-ci. Notre but est, en conséquence, présenter une périodisation et une systématisation des groupes écologistes prenant en considération des aspects très diverses, comme par exemple l'échelle de son activité, leur savoir scientifique, son niveau de compromis social, sa structure organisatrice ou les formules de revendication utilisées. Nous proposons donc une contribution dont la finalité est celle de caractériser diachronique et synchroniquement le mouvement socio-environnemental catalan, ainsi que formuler une hypothèse relative au rôle de ce mouvement dans le développement des nouvelles mentalités environnementales et dans la formulation de politiques publiques sur la base du principe de la gestion durable du territoire.

**Post-Modern Epistemology: Universities, Engagement, & Trustworthy Expertise –  
L'epistémologie post-moderne : universités, engagement & expertise fiable**

*Naomi SCHEMAN*

University of Minnesota

USA

Epistemology has been justly criticized for being ahistorical, acontextual, foundationalist, and tied to a liberal individualist conception of persons. The justness of the critique reflects the historical role played by epistemology in empowering the modern bourgeois individual, for whom privilege consists in successfully animating generic personhood: the disinterested scientist or jurist, the ideal observer of moral theory, rational economic man. The privileged in modernity are those who best exemplify what is supposed to be our shared essence; indifference is disqualifying. A wide range of social, political, economic, and cultural factors have dealt a fatal blow to generic personhood and, with it, modern epistemology. But, I argue, epistemology has a (radically transformed) place in post-modernity, in addressing everyone's unavoidable dependency on socially legitimated expertise and the technologies it spawns. The trustworthiness of expertise rests, I suggest, on its being rationally acceptable to those most socially distant from its origins by reason of marginalization, oppression, or invisibility. Grounds for such trust are absent and research is untrustworthy when institutional sites for expertise (notably, research universities) act out of arrogance and fail to embody values of social justice and inclusiveness. Respectful local and global community engagement thus need to be at the heart of a research culture, lest the products of that research be both inadequately tested from diverse perspectives and unworthy of widespread acceptance (both of which are largely the case today). Examples include GMO science and technology, as well as the legacies of colonialism that fuel the distrust some Nigerian parents show toward polio vaccinators.

**Fabriquer le futur grâce à l'innovation ascendante – Constructing the futur thanks to bottom-up innovation**

*Eric SEULLIET*

La F@brique du Futur, Paris

France

Le propos central est d'expliquer et d'écrire la dernière révolution à l'oeuvre dans le domaine de l'innovation : la co-création de produits et services par les consommateurs eux-mêmes. Après avoir traité leurs clients en consommateurs passifs, les entreprises ont progressivement pris conscience à partir des années 90 que les consommateurs sont des personnes auxquelles il fallait fournir une offre la plus personnalisée possible. Mais désormais, une étape supplémentaire est en train d'être franchie : les consommateurs ont des compétences reconnues qui les rendent aptes à participer efficacement au processus de co-développement de produits/services nouveaux.

**Similarities and differences between two initiatives to participate in the social/scientific debate in Italy. A proposal of integration. - Parallèles et différences entre deux initiatives de participation dans le débat socio-scientific en Italie. Une proposition d'intégration.**

*Adriana VALENTE, Luciana LIBUTTI, Elena DEL GROSSO, Michela MAYER, Alba L'ASTORINA*

Istituto di Ricerche sulla Popolazione e le Politiche Sociali  
Italy

The aim of the paper is to compare two experiences of participatory processes in the social and scientific debate. After describing the differences and the points of strength and weakness of the two models in terms of level and kind of participation, representativeness, impact, specific aims, etc, conclusions will be drawn in terms of possible integration between the two approaches. The first experience is realised in the project "Perception and Awareness of Science", carried out by the Italian National Research Council (CNR), the British Council and The Rosselli Foundation within the cycle of initiatives "Ethics and Polemics". The purpose of the project is to promote a public debate between secondary school students and experts on the critical, ethical and interdisciplinary components of "in action" science (Latour, 1988), in order to enhance participation and shorten the distance between youth and science.

Within this project, four initiatives were held: the first one on GMOs, which took place in Bologna in 2002-2003; the second on electro-magnetic waves in Rome in 2003-2004; the third on space exploration in Naples and Rome in 2004-2005; the fourth on the impacts of climate change on cities in Rome and Milan in 2006-2007.

For each initiative two main activities are foreseen: the structuring of the debate within the student groups and the completion of a survey on perception of science and its values (with two questionnaires before and after each initiative). The first activity consists of several phases:

1. First, some groups have been involved in the "metaplan" technique for enhancing personal involvement and participation.
2. Structured documentation, representative of the plurality of the scientific debate and of the main social instances, is given to the groups.
3. In the groups, much emphasis is given on the chances of an informed dialogue between students to create "tacit understanding" and "collective wisdom" (Condit, Parrot, Harris, 2002).
4. Roundtables are organised to facilitate a debate among students, teachers, scientists, experts, stakeholders and administrators, and to give evidence that communication is a two way process.
5. In the last event, a follow up consisting of a restricted round table among students, scientists and administrators has been organized, with the aim to further emphasize the deliberative/propositive involvement of students.

The result of the second activity – the surveys on the perception of science and its values- have been described elsewhere (A.Valente (edited by), Roma, 2006).

The second experience focuses on a specific problem: how to convince people to participate.

This participated science research makes use of specific tools and methodologies; it can realize an approaching way (Outreach) and a final open meeting or Open Space Technology thought to facilitate the real, positive and active participation of people who are very involved in the proposed scientific questions.

Outreach is composed of:

- Open single interviews: in order to gather needs and desires, opinions and suggestions of women and men, we need to listen to their self-history or self-tale. It is important also to listen to "privileged witness" and stakeholders of the specific argument or theme;
- The search conference: it involves preferably unhomogeneous groups and can be used to investigate a single theme from various angles. Also the choice of the place where the search conference takes place is very important and significant to the aims of research. During the whole phase of outreach the place emerges from the indications of participants.

The above described methodology has been carried out in the "political agenda of women for Bologna" in 2004.

The final open meeting (Open Space Technology) has included in particular two open questions among many others:

- 1) How politicians and expert groups can be involved in sharing the responsibility of decision making with the civil society?
- 2) How can the participated science project take into account the relationship between society's values and needs of knowledge of scientists as well as the economic, civil and military aspects of Science and Technology?

The two experiences have many points in common; nevertheless, as they consider with priority different social groups (students within or without an area/citizens in an area) and have a slight different general objective (participation in the scientific/in the social debate), each one carries out a different model of participatory process within the concept of deliberative democracy.

This explains the main differences of the two experiences: a. etero-organised vs self-organised system; b. role of endogenous and exogenous documentation; c. structured vs open interviews.

For both experiences a question arises relating to the main meaning given to “participation”: large presence (quantitative) or in depth capacity to be propositive and deliberative?

The challenge is to integrate as much as possible the two participatory processes, to profit by open space within a scientific context; the core of the question is how to define a proper participation technique model within a highly formalised (and sometimes highly autonomous) context as school is.

### **Building health literacy to secure free prescription drugs**

*Kathey LAROCHE, Teresa KELLY, Elizabeth RUGG*

Suncoast Health Council

USA

Access to prescription drugs is a critical element in the effective management of chronic disease. Health care consumers who are low-income, uninsured and/or medically under-served are often forced to choose between the use of prescription drugs and the purchase of other essential goods and services, such as food and housing. In general, the cost of prescription drugs is a specific barrier to care for low-income working-age adults, particularly African Americans and Latinos who report being substantially less likely to fill prescriptions than their white peers. In general however, the inability to purchase prescription drugs is an issue that transcends race and ethnicity among working age adults, where one in four multiply-diagnosed adults report not purchasing at least one of their needed medications. The inability to purchase and utilize prescription drugs often exacerbates chronic conditions, and ultimately results in acute episodes that require hospitalization and/or urgent and more costly care in a hospital emergency room.

Project description: The goal of our MedNet? program is to access medications for area residents from compassionate drug programs. The community education component of MedNet? provides a hands-on tutorial to teach chronically-ill, low-income working adults how to access compassionate use programs on their own using web-based systems accessible through in-home computers or computers located at public sites, such as libraries. The free neighborhood workshops introduce health care consumers to compassionate use programs generally, but it also provide specific information about the various eligibility requirements for each program. Individuals with chronic illnesses are given the tools to advocate for their needs using today's technology.

We will discuss the design of the tutorial program as well as issues related to building collaborative partnerships.

### **What do the public think of us and what do we think of them? Lessons from ‘You & Your Body’ at the University of Leeds – Qu'est ce que pense le public de nous et qu'est ce que nous pensons du public ? Léçons de « Toi et ton corps » à l'Université de Leeds**

*Vicky WARD*

University of Leeds

United Kingdom

There is significant interest in the concept and practices of public engagement, particularly within science. University communities are especially keen to engage more with local stakeholders and members of the public. This is evidenced by the high number of applications (84) received by the Higher Education Funding Council for England in response to a call for ‘beacon’ centres for public engagement. However, despite the rapid growth in the number of public activities being undertaken by university communities, many of these only focus on young people, where there is the potential for student recruitment. There has also been recent concern about the failure of young university researchers to become involved in public engagement at all. This appears to be because public engagement is viewed as time-consuming and of limited value.

Universities' failure to engage with local communities has far-reaching implications, not least carrying out costly and time-consuming research which does not meet public need and demand. Such disengagement

can result in decreased public confidence, decreased credibility and the slow uptake and implementation of research (Haines, Kuruville et al. 2004). Conversely, engaging the public earlier in the research process has been shown to result in the effective implementation and uptake of research, leading to outcomes that benefit local and global society.

The University of Leeds, with the support of the Wellcome Trust, has recently undertaken 'You & Your Body', a series of interactive public engagement events. Our aim is to engage the adult public with the biomedical expertise of the University. Each event focuses on a particular aspect of the body and presents the latest research and approaches being used. The events have seen us embark on a journey with a wide cross-section of the local community. A large proportion of each audience has reported attending a previous event in the series, suggesting that the series has grown public confidence in the research and science taking place at the University.

In addition to discovering what works in engaging the public with our university, the events have afforded us an important opportunity to assess the perceptions of the local public about the University of Leeds and science research. Our researchers and scientists have also provided information about their perceptions of 'the public'. This paper will share these important messages from our own context before extending our learning more broadly with the aim of increasing current understanding of the issues which may be encountered by universities who are seeking to engage the public.

### **Land Use as a Game – l'utilisation de la terre comme jeux**

*Anke VALENTIN*

*Wissenschaftsladen Bonn*

*Germany*

In Germany, to a growing amount land is used for urban planning and constructing. Therefore the presented role game concentrates on sustainable and reasonable use of land. As in Germany all land use decisions usually are made by local governments the role game is played in the local town hall, with most of the pupils being there for the first time. The role game addresses school kids. It invites the participating pupils to enter the role different political parties. The entire process of decision making has to be acted through, pupils have to elect a mayor, establish the council and have to make decisions on all different scenarios that they are asked to (e.g. where to locate a new residential area). Doing this the pupils will improve their ability to make deals, to look for compromises, and to follow their own opinion.

Up to now, around thirty role games have been played organised and lead by the Bonn Science Shop and its partner (a network of cities in North Rhine-Westphalia). All playing-materials, that have been optimised with teachers, pupils and scientists are free for download.

Another idea to bring land use closer to school contents will be realised by a specific GIS-supported software, that will enable pupils to plan areas in their home town. In the near future the Bonn Science Shop and its partner (responsible for the technical realisation) will publish a computer game on urban planning with dynamic development processes.

### **Magic kitchen - healthy children at Dransdorf, a social disadvantaged district of Bonn – Cuisine magique – enfants en bonne santé à Dransdorf, un quartier de Bonn défavorisé socialement**

*Cornelia VOSS*

*Wissenschaftsladen Bonn*

*Germany*

Sweets or pizza ready to eat are popular with children. The consequences of the excessive supply of fat and sugar: Overweight and bad teeth. The concept of the "magic kitchen" wants to oppose this with a well balanced nutrition suitable for children. Children of different nations living in the social disadvantaged district Dransdorf and coming from a playground with professional child minders or the local homework assistance as well as their friends participated in altogether 11 meetings of the "magic kitchen". Here the children learned playfully that there are various healthy and delicious food besides the usual sweets and convenience food or fast food. They experimented, cooked and enjoyed their meals together. The multinational group of children also prepared a meal only for their parents and invited them to have a common meal. By this new ideas and an openness for new can also grow on the part of the parents.

Cooking is a good training for the fine motor activity, social interactions and fosters the concentration of the children. The six to fourteen-year old children saw by means of colour tests, how strongly sweets and fruit stick on their teeth and they learned how to brush their teeth. The program for the children also included exercises through games and outdoor sports, which besides sharpens perception of the children. Another attraction was a visit on an ecological producing farm.

The Bonn Science Shop coordinated the project in cooperation with the Stadtteilverein (community group of the district) Dransdorf, The project was awarded financial support by Aktion Mensch, a social organisation for handicapped persons and the Betriebskrankenkasse (health insurance company) Rheinland.

**À la recherche d'un modèle de contrat d'assurance environnementale qui couvre certains risques de la coexistence compris dans le projet de loi espagnole sur la responsabilité environnementale - Un partenariat parmi le pouvoir politique, les expertises, les compagnies d'assurances, les agriculteurs, les groupes écologiques et la société civile.**

*JUSTO Corti-Varela*

Universidad Complutense Madrid  
Spain

L'Espagne est le principal producteur de plantes GM en Europe (60.000 hectares de maïs Bt, une espèce qui permet la pollinisation croisée et une variété transgénique qui sécrète une toxine mortifère contre certains insectes). Cependant, il n'y a pas encore de régulation étatique de la co-existence. Le projet de loi espagnole sur la responsabilité environnementale qui transpose la Directive 2004/35/CE exige une garantie financière (contrat d'assurance, aval financier ou réserve technique) pour les sujets de droit qui développent une activité dangereuse (art. 24), en incluant « toute libération intentionnelle dans l'environnement, le transport et la mise sur le marché d'organismes modifiés génétiquement... » (Annexe III). Néanmoins, le concept de « dommage environnemental » est très restrictif. En ce qui concerne les problèmes de la co-existence, il ne comprend que les dommages causés aux espèces et habitats naturels protégés (zones « Natura 2000 ») ou les dommages affectant les sols qui engendrent un risque d'incidence négative grave sur la santé humaine (arts. 2-a et 2-c de la Directive). En aucun cas, cette nouvelle législation n'est compétente pour les dommages économiques parmi les agriculteurs. La garantie financière ne sera obligatoire qu'en 2010, donc on a trois ans pour établir un cadre de co-existence sur lequel construire les outils juridiques et financiers pour la remplir.

On travaille dans un équipe interdisciplinaire (deux ingénieurs agronomes, une géologue et un juriste) dans un contexte de collaboration entre l'Université Complutense et la compagnie d'assurances Mapfre, à la recherche d'un modèle de d'assurance environnemental qui couvre les risques de la co-existence compris dans la Directive 2004/35/CE.

Premièrement, il faut identifier et quantifier les risques selon les rapports scientifiques disponibles. Nous prendrons en compte les règles nationales en vigueur, les projets de loi et les rapports européens comparés sur la co-existence.

Deuxièmement, avec toute l'information disponible on fera un modèle économétrique pour évaluer et mesurer le risque aux trois scénarios possibles: production et commercialisation sans règles de co-existence (scénario actuel), avec des règles de co-existence selon les rapports scientifiques (scénario deux), et avec des règles de co-existence selon les rapports scientifiques plus une approximation politique de précaution (scénario trois). Pour chaque scénario possible, le modèle nous donnera un niveau de risque et une prime d'assurance.

Troisièmement, on communiquera les résultats des trois scénarios aux associations d'agricultures et aux associations écologiques et on fera un sondage pour connaître leurs opinions et réactions, spécialement a propos de la relation coût / couverture.

Finalement, on construira un modèle de contrat d'assurance environnemental qui couvre les risques de la co-existence compris dans le projet de loi espagnole sur la responsabilité environnementale (Directive 2004/35/CE).

Aujourd'hui nous sommes dans la première partie du plan exposé. On espère avoir les premiers résultats de la deuxième partie à la fin d'août et les discuter avec les divers acteurs de la société civile au 3e conférence Living Knowledge.

## **Disaster response- importance of local knowledge – Réponse à des catastrophes – l'importance des savoirs locaux**

**Tom THOMAS**

Praxis - Institute for Participatory Practices, New Delhi  
India

Involvement of the affected communities in disaster management is a fairly nascent concept, however surprising it may seem. There is an urgency and sense of immediacy that is intrinsically entwined to disaster response. Therefore, practice has it that natural disasters and calamities are dealt with from a supply side management and logistics perspective. (Characteristically, ex-military personnel are in great demand temporarily with organisations that venture into relief and rehabilitation efforts, however much they would otherwise frown upon the top down, delivery-at-all-cost approach to aid and care!)

This despite the fact that the description, 'on war footing', to rescue and relief efforts hold currency for no more than a week into the disaster. Systematic relief delivery and arduous rehabilitation programmes are today planned efforts, encapsulating a long-term perspective and strategic vision. This is born out of the experience that natural calamities that engulf whole regions and communities, killing thousands of lives and depriving lakhs of livelihoods, demand efforts of years to nurture the affected back on their feet.

How critical is it to facilitate the participation of the affected communities in the planning and decision making processes linked to disaster response? Indeed too critical, which is what the Village Level Planning exercises that Praxis facilitated in the tsunami-affected regions of Nagapattinam and Karaikal in India bear out.

## **La communication engageante appliquée à l'environnement : une pratique de recherche participative – Engaged communication for environment: a participatory research practice**

*Françoise BERNARD, Robert-Vincent JOULE, Jean LAGANE*

SIC, CREPCOM, Laboratoire de Psychologie sociale, Université de Provence  
France

Les auteurs proposent une réflexion sur les pratiques de recherche participative impliquant des laboratoires de recherche universitaires en sciences sociales, le mouvement associatif /la société civile et les pouvoirs publics (Villes, Régions). Les auteurs prennent appui pour conduire cette réflexion sur un ensemble de recherches-actions conduites dans le sud de la France et consacrées au développement des comportements et des valeurs écocitoyens. Ces recherches actions sont achevées ou en cours et sont inscrites dans des recherches subventionnées (ANR, ADEME, Région). Les auteurs proposent un nouveau paradigme permettant de travailler la relation entre communication et action. Les travaux conduits en "environnement naturel" ont pour effet d'inscrire dans un cours d'action écocitoyen les citoyens d'une Ville, les usagers des plages, de la mer. Les associations sont impliquées dans la conception et la conduite de ces recherches-actions. Après avoir présenté le cadre théorique, les auteurs posent un ensemble de questions relatives aux enjeux, aux conditions et aux limites des pratiques d'une recherche participative. La relation entre recherche et cité est également questionnée. Des éléments d'analyse de construction de réseaux impliquant recherche et société civile seront également proposés.

## **Innovation for traditional wood processing (TWP) preservation within the digital culture – L'innovation pour la préservation du traitement traditionnel de bois dans la culture numérique**

*Gabriela FLORESCU, Valentin FLORESCU, Parvu IONICA*

National Institute for Research and Development in Informatics and Crafts Foundation Romania, Bucharest  
Romania

Culture and civilization of any nation could be maintained, sustained and communicated to next generation by the IT tools which allow the activation of the educative and cultural act in a modern, safe, special form and with an efficient use if there is interest. Romanian people have developed from century a gigantic culture of wood, culture which gathered with the other cultural forms created by Romanian people is called "Romanian Wood Civilisation". This huge heritage is on the way to be damaged and even lost as with time fewer and fewer craftsmen perform the traditional wood processing. Scientific research is producing knowledge when deeply try to investigate the ancient times when society was captivated by the incredible art of wood craftsmen. Many times, we are wondering how in those ancient time were to build a house of wood, a church of wood, tools of wood, installation of wood – wind mills, water mills-, musical instruments, or

furniture. The brotherhood of Romanian people with their forests was at the basement of that ancient civilisation. The woodcraft is based on an incredible artistic and practical skill of those craftsmen. The modern society with many benefits indeed many times led to an attenuation of the craftsmen importance and in our days are made efforts to record the crafts still living within a small community of very old craftsmen spread all over the country.

TWP reflected in the house architecture and its annexes, in pieces of furniture, objects for home, musical instruments and especially for religious objects is threaten to disappear in our days as few craftsmen still owe the secrets of this craft. The variety of the objects resulting from this craft imposes a huge volume of information regarding these objects but also many the traditional methods of wood processing to be kept as part of the European cultural heritage. In order to preserve the traditional wood processing, scientists and craftsmen, are cooperating within a national research program REDILEMN in order to scientifically build the digital cultural resources on wood processing. The non-governmental organization, the Crafts Foundation Romania is partner of this cooperation. The paper will present the project and the main gains up to date referring the support to the innovation in craftsmen activity preservation. Civil society and the ethnographical scientist will both use an accurate information for cultural and scientifically processes. An innovative e-learning module will promote the distance education generating comfortable condition for information gaining and communicating between generations. This project and its results is an example in which the citizen and scientists work together innovating and producing added value for the community.

Remarks: We are interested to network with similar initiative trying to innovate the way in which tradition is recorded and transmitted to further generation as a part of world cultural heritage.

### **Collaboration, community engagement and capacity building: Elements for engaged scholarship – Coopération, collectifs citoyens et construction de capacités – des éléments pour une science engagée**

*Anne-Maree DOWD, Michael CUTHILL, Madeleine BRABANT*

University of Queensland, UQ Boilerhouse Community Engagement Centre, Ipswich  
Australia

The concept of 'engaged scholarship', as an example of contemporary research methods, is of current interest in Australian academia. Australian universities currently contribute much to their local communities through diverse initiatives but the components of engaged scholarship have not been well defined at either the centre, institutional or national levels. By incorporating three key elements, collaboration, community engagement and capacity building, this paper presents a case study on engaged scholarship to inform the ongoing discussion around these topics. The case study will be presented on The University of Queensland (UQ) Boilerhouse Community Engagement Centre. Details of the Centre will cover: a) a theoretical context for engaged scholarship (specific emphasis on participatory action research); b) a methodological framework for engaged scholarship; and c) reflections on practice (describing some of the key learning that has emerged through the UQ Boilerhouse experience). While this paper focuses on an Australian case study of engaged scholarship, many scholars argue that such scholarship is being widely adopted by universities around the world. The UQ Boilerhouse Community Engagement Centre provides a theoretical and methodological case study of engaged scholarship implemented at a research centre level.

### **Dig and learn**

*Norbert STEINHAUS*

Wissenschaftsladen Bonn

Germany

Science Shop Hungary, Gödöllő, Hungary; InterMEDIU Bucharest and Inter-Mediu Bacau, Romania

Exploring the Ground Fostering Scientific Understanding in Primary Schools (EFSUPS) is a cooperation project of Science Shops and universities which has been awarded financial support by the European in the research area Science Education and Careers 2005 under the 6th Framework programme.

In this two years project in which partners from Romania, Hungary and Germany cooperate, country specific soil problems will be picked out as central themes to promote the scientific understanding in primary schools based on the education for a sustainable development (ESD) and to link educational institutions with external partners outside of schools.

These objectives should be achieved by the development of a curriculum for general knowledge instructions and a teachers guide and toolbox on soil issues, training seminars for teachers, courses at schools and three national workshops, and a website for the dialogue between participating kindergartens and primary schools and beyond as well as for the exchange of experiences and project results.

EFSUPS activities run from November 2006 until October 2008. A pre-test of the developed training units will take place in cooperating schools and kindergartens in October 2007. The training seminars for teachers of participating schools will be held in November and December 2007. Pupils instruction and practical teaching in classes to apply the offered tools is planned for April 2008. A workshop in each participating country to present the results of the project will be organized in October 2008. The EFSUPS website will be online in August 2007.

The presentation will give an introduction to the several activities and tools to be developed and offered by the EFSUPS consortium.

### **Establishing Science Shops in South East Wales: A Synergistic Strategy**

*Steven R. HARRIS, Leonie SALMON, Naomi TURNBULL*

S-E Wales Sci-Shop Network  
UK

The Valleys region of south-east Wales, UK, suffers from significant levels of socioeconomic deprivation. One aspect of this is that in some areas up to 40% of adults have difficulties with reading, writing and basic mathematics, and there is a long history of a very low level of engagement with traditional academic institutions. When the South East Wales Science Shop Network (Science Shops Wales) was established in September 2006, it was clear that becoming an effective agent for change was potentially problematic, as the most disenfranchised communities are also those that are least likely to proactively seek the services a university-based Science Shop provides.

This paper will outline the early stages of Science Shops Wales' (SSW) attempts to develop an innovative and cumulative strategy to serve these communities. This has two principal components. Firstly, learning from the experience of European models, and working collaboratively with local community groups, SSW employs a combination of education, training and research to provide a flexible 'toolkit' of resources. By targeting those community concerns which are echoed across the region, it is hoped that these toolkits can be refined, applied and delivered to the wider society. In turn, the toolkit aims to create a 'seedbed' from which individual projects can grow, and continue to flourish in the future as citizen-led initiatives. Effective knowledge transfer and sustainable change may thereby occur without the need for a prohibitive level of investment.

Secondly, in order to engage with the broadest possible range of citizens, SSW is drawing upon existing techniques in basic adult literacy and numeracy education to design locally relevant outreach materials. Emphasis is placed on the interpretation, communication and dissemination of scientific concepts through the design and production of a series of printed (and in due course, internet-based) publications. In order to further stimulate and build local awareness and understanding of science and technology issues, SSW is involved in a variety of outreach activities. These include workshops, informal talks and discussions, which act as a catalyst to encourage and motivate the public to engage in collective and participatory scientific activities.

The common thread linking all of these activities is growing local concern with sustainable development at local and global levels. By focusing as much as possible on this central theme, we hope to foster a productive synergy between the provision of research toolkits and outreach activity. Our goal is to provide a succession of outputs which will form the foundations on which to build and implement future steps: knowledge which is accessible, relevant, locally-focused and of real value to the communities of south east Wales.

### **Activating the democratic citizen: civil society and technology**

*Georgia GOUGA, Ioannis KAMARIANOS*

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The changes that the use of Information and Communication Technology (I.C.T.) in social life brings, altered the notions of 'sociability' and 'social subject' changing variables that up to today were considered stable, as time and space. Thus, the study of the phenomenon is particularly complicated, since the change concerns from the small local society to the everyday life in the globalized mega-city. In this paper we will attempt to redefine the concepts and processes that will allow us to point out the modern

character of the ICTs' operation and their relation with citizenship creating a concrete methodological framework. We believe that without such a framework, societies will not be led to values and practices that will strengthen democracy.

Citizenship, is not just a legal status, but the adoption of democratic values and practices, the creative coexistence and collaboration with the "other". The answer to many important everyday socio-political dilemmas must be given under the criterion of the basic constitutive values of freedom and equality. Through these answers the quality of political management of everyday routine of social subjects in the modern western societies is determined.

The importance of changes that the ICTs brought to the concept of citizenship is such, that urges us to detect a new situation, post-Citizenship.

The importance of citizens' participation in the city, appears to concern more the society of market than civil society. The paradox is that although the sphere of consuming enlarges, the rights that concern participation in public life, seem to shrink.

The comprehension of reason that is produced by the use of ICT will allow the developing of concepts for civil society research with regard of citizenship production of knowledge with regard to the application of suitable inquiring methodology, aiming the understanding of the modern nature of civil society and the possibility of activating the democratic citizen.

### **Building Capacity for Governance: The Role of Universities**

*Cecilia ROCHA*

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Canada

The paper describes the pivotal role that universities have been playing in fostering local partnerships for sustainable food and nutrition security in the project Building Capacity for Food Security in Brazil. Funded by the University Partnership for Cooperation and Development program of the Canadian International Development Agency (CIDA), the project focus on the formation of social actors for food security in the regions around three cities in Northeast Brazil.

### **Students as World Citizens: Hope and Possibilities for a World-wide Agora on Horizon Technologies through Education**

*David BLADES, George RICHARDSON*

University of Victoria and University of Alberta  
Canada

One legacy to humankind from the 19th and 20th centuries is the implementation of systems of public education by nation states worldwide. Despite the often destructive, colonial nature of these systems and the lack of uniformity in system availability and participation, public education nevertheless presents a unique opportunity for humankind to influence the development of the next generation of citizens. Our research on the attitudes and thinking of peer-matched secondary school students in Canada and Japan (n = 194) reveals the extent of this opportunity: students in both countries already consider themselves "citizens of the world" as well as part of a nation state. The study discovered that students have, as emerging adults, well-developed and often quite sophisticated understanding of the issues facing humankind, such as global warming, regional conflict, epistemic poverty and human rights violation.

This paper in particular examines students' perceptions of "horizon technologies" (Blades & Richardson, 2006), such as human cloning, production of intelligent androids, engineering of the human genome, and other emerging technologies. The research suggests that students are concerned about the effects of technology on human relations and even the survival of our species and wish to take part in the direction and evolution of these technologies, although there is conflicting data from the students on who they believe should initiate this involvement. Their desire to be involved as citizens in the role, direction and place of science and technology in society—to engage in "citizen science"—provides a platform for conceptualizing such involvement. In our paper we suggest how, with little modification to existing, traditional curriculum frameworks, students in several countries could link through present technologies to form a virtual "agora" or marketplace where the issues facing humankind and avenues for social action might be presented. A worldwide agora would enable students to report on the efficacy of their acts, provide trans-national support networks and would extend the students' understanding of their responsibilities as citizens of the world.

When presented with this idea, students in both countries were keen to talk with their peers but, characteristic of the depth of student thinking, each group of citizens reminded us that for such conversations to be truly worthwhile, an agora would have to extend beyond the “rich kids” to include the peers in countries with less economic advantages. With this consideration, we see possibilities and hope in the formation of groups of students from a variety of nations involved in school-support agora that extend the concept of being “citizens of the world” to practical expressions through social action projects. Such agora would, we believe, provide a foundation for developing the conceptual understandings and support systems that would enable the next generation to become the informed, active and internationally engaged world citizens able to meet the challenges facing humankind in the 21st century.

Reference: Blades, D. & Richardson, G. (2006). The pedagogy of androids. *Educational Insights* 10(2) (On-line). Available from: <http://www.ccfi.educ.ubc.ca/publications.v10n02/blades/richardson.html>

Remarks: This paper reinforces the importance of thinking about the foundations for “citizen science” and the opportunities presented by public education, thus the paper has foundational importance for discussions on citizen science, given that the students we interviewed are only a few years from being able to vote as citizens in their respective nations. In this way, we believe the data presented and ideas proposed fit the conference themes very well.

### **Appropriation as key issue for science-based policy making**

*David CAPES*

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France

When defining an institutional and methodological approach of participatory science-based policy making, we need to prevent the all process from the risk of sterile circularity. This risk has two faces : 1/ developing projects that start and end with groups of scientists and officials, even if stakeholders and citizens inputs have been integrated into the policy making, 2/ maintaining and even developing isolations between knowledge productions and narrow-minded actions. The key issue is appropriation. The guiding-question, since the very beginning of the project, must be : what kind of results can be appropriated within the social, political and economic cognitive and concrete action systems of the possible recipients and users of these results ? The problem is that the process itself being participatory, the possible appropriation is changing at the same time as the process is held. My hypotheses is that the best way to manage with method and productivity this instable situation is to conduct two parallel and coordinated processes : 1/ conceiving flexible socio-cognitive frameworks compatible with scientific assets and policy-making feasibility; 2/ learning from micro-projects of appropriation that test implementation of policies connected to results of participatory science-based. The European Life Environmental project Concert’eau is developing this approach.

### **Public understanding of Immunology**

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India

The topic of public understanding of Immunology is a title of today. Most of the treatments for the diseases such as kidney failure, Liver failure, Autoimmune disorders, Hypersensitive disorders, AIDS, Cancers the knowledge of Immunology is highly needed. Hence the citizen should be made to know the concepts of Immunology and the public understanding of Immunology should be strengthened by doing some innovative methods like story telling, skits, games etc . Public understanding of Immunology will definitely help the citizen to know better about their health.

This exercise could be practised any where in the globe. High upscaling is possible in this mode of action. Hence this technique could be employed to strengthen the knowledge of Immunology among the public.

**Developing new local child welfare practices***David THORPE, Suzanne REGAN*University of Trondheim and University of Lancaster  
Norway, UK

This paper will begin by discussing the reasons why social work academics do not undertake research into local social work practices and help develop new practices with local agencies as partners. Instead they prefer to do social policy research because it is methodologically easier. However, this offers very little to practitioners who are aware of the limitations of abstract policy statements to their very local, situated practices. The paper will describe research undertaken in a very local setting into social work practices and their outcomes. It will show how local practitioners in the agency were involved and how the research enabled them to reflect on their taken-for-granted assumptions about the benefits of what they do and how as a consequence their practices changed. The paper will look at the links between Policy, Organisation and Practice and show how the links between policy-makers and local interventions are very tenuous. It will suggest that social work academics re-examine their own practices and beliefs about their contribution to the profession about which they claim they have an intellectual command.

Remarks: This paper will not only describe a research project which brought immediate benefits to social workers and their clients but also present a historical and contemporary analysis of the way in which social work academics relate to local social work agencies.

**"You've got it; You may have it; You haven't got it': The unintended consequences of HIV testing***Kevin CORBETT*Institute for Health Research  
UK

This paper considers the experiences of health consumers who as one form of end user of medical screening technology have undergone diagnostic screening using HIV antibody, T cell and polymerase chain reaction (PCR)/viral load tests. These HIV-related screening tests are deployed for the purposes of making definitive diagnoses yet some health consumers experience anomalous outcomes reported in the literature. Drawing on an analysis of different end user experiences of these tests, where consumers' knowledge reflected the multiplicity and heterogeneity in test design, I explore how these user-reported experiences (whilst maybe unintended) actually reflect particular knowledge about these tests leading some to actively contest the medical inscriptions of these tests. In this way, the paper contributes to efforts documenting how health consumers as technological end users co-construct the social meaning of technologies in mutual relationship with other users and within/across global activist networks of lay publics and communities of scientists. Of particular relevance is how such technical knowledge can be politically deployed to delineate a counter-technical social movement and to re-evaluate health consumers' role in medical screening for critical assessment of test design and performance.

**Science, technology and civil society - Civil Society Organisations, actors in the European system of research and innovation (STACS)***Claudia NEUBAUER, Eric GALL*Fondation Sciences Citoyennes, Paris  
France

This two-year European project started in March 2007 with the support of the European Commission (contract 044597; 6<sup>th</sup> Framework Programme, Work Programme "Science and Society", Call FP6-2005-Science and Society-19).

STACS is a project from seven NGOs coming from different countries and horizons: Fondation Sciences Citoyennes, Paris, France, European Public Health Alliance, Brussels, Belgium/International, Free Software Foundation Europe, Sweden, Greenpeace UK, London, Great Britain, Réseau Semences Paysannes, Brest, France, DEMOS Building everyday democracy, London, Great Britain, Institut Mensch, Ethik, Wissenschaft, Berlin, Germany.

Presentation:

The issue of civil society involvement in research has received so far little attention.

Increasing the societal relevance of research implies numerous questions: In which cases and how civil society can be fruitfully involved in the regulation and production of scientific knowledge? How to prepare civil society organisations (CSOs) to participate in foresight and science policy activities and in research projects? How to get scientists interested in projects with CSOs? How to make the case to policy makers for the constructive participation of CSOs in research? How to ensure that scientists and CSOs can build common projects for Framework programme 7 (FP7)? Our project will attempt to explore these questions. STACS aims to explore the feasibility of future academia-civil society partnerships in different research areas and how to optimize the interaction between science dynamics and the needs and concerns of society. The results of STACS would find their full meaning when they would be taken into account in the elaboration of future programmes within FP7.

In the purpose of reaching this main objective it is divided into five general objectives. We propose:

1) Capacity building sessions on socially-important scientific issues to build the capacity of CSOs to approach scientific questions.

2) Workshops serving as research project « nurseries », identifying research topics for co-operation between CSOs and public research institutions and aiming at involving CSOs in future research projects for FP7.

3) A website, lasting beyond the project, providing a European-wide platform for exchange between CSOs and scientists.

4) An analysis of the European research system, raising awareness for CSOs and strengthening their capacity to benefit from European research.

5) Meetings with members of the European Parliament and officers of different DGs of EC (presentation of our findings, generate discussions on how to bring European research closer to citizens).

Capacity building sessions and workshops will identify ways to build links with research institutions and identify research groups interested in working with CSOs. The topics (showcases) address thematic priorities of FP 7 such as health, agriculture, nanotechnologies and socio-economic sciences.

You will find all information about the project and how you can participate at our website:

[www.citizens-science.org](http://www.citizens-science.org). We are waiting for you!

### **Le Parc National à El-Kala**

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Département de géologie, Annaba

Algérie

C'est en préparant un travail de thèse de doctorat 3<sup>ème</sup> cycle sur le littoral de l'est algérien ( de la ville de Jijel jusqu'à El-Kala ) que Thomas J.P (1975) s'est rendu compte de la richesse biologique de la région d'El-Kala avec une mosaïque d'écosystèmes presque intacts :

Un littoral non pollué ( absence totale d'industries ) ;

Des forêts exubérantes avec beaucoup d'espèces endémiques et rarissimes ;

Des lacs d'eau douce et d'eau saumâtre ;

Une faune riche et diversifiée avec des milliers d'oiseaux et la présence splendide du cerf de barbarie »Cervus Elaphus Barbarus »

C'est à ce chercheur que revient le mérite d'avoir souligné en premier l'utilité de création d'un Parc National à El-Kala ce qui fut fait et ce dernier voit le jour le 23 juillet de l'an 1993 ( par décret N°462 ).

En raison de son importance écologique et de la place qu'il occupe dans le suivi des modifications climatiques qui affectent la planète, il a été classé par l'UNESCO le 17/12/1989 comme réserve de la Biosphère et six de ses sites sont retenus au titre de la convention de Ramsar (1971) comme zones humides d'importance internationale .

D'une superficie de 76 430 hectares, le parc national d'El-Kala occupe le quart du territoire du département d'El-Tarf et touche huit (08) communes rurales avec plus de cent milles habitants . Le parc subit l'influence d'un troupeau de deux cent milles entre ovins, caprins et bovins et est confronté à de sérieux problèmes environnementaux mais aussi à des changements économiques et sociaux rapides . De plus en plus, l'enjeu consiste à déterminer comment gérer la valeur patrimoniale et les richesses spécifiques ( biodiversité )du par cet les conflits relatifs à la demande sociale de plus en plus grande ? C'est dans cette situation qu'intervient le projet de plan de Gestion et d'Aménagement du Parc National et du Complexe de zones Humides avec un

apport financier du GEF ( fonds Mondial de l'Environnement ) de 9,2 millions de dollars US . Le projet a été cloturé avant terme en 1997 sur un résultat mitigé . Quelles leçons peut-on tirer de cet échec si on veut pérenniser l'existence du parc ? Ensuite nous poserons les questions suivantes :

- S'agit-il de conflits d'autorité ?
- De jalousie de prérogatives ?
- De partenaires défaillants ?
- D'acteurs locaux insuffisamment impliqués ?

Ou alors faut-il laisser le Parc dans une situation d'avenir incertain ?

C'est à cette problématique que nous tenterons de répondre en rationalisant les mécanismes de gestion administrative et en impliquant les acteurs locaux ( collectivités locales, société civile et ONG, population locale ), en reprenant les choses à leur début .

On comprendra que dans une telle situation c'est à l'éducation ( et pas seulement l'éducation des enfants ) qu'échoit le rôle du premier plan .

### **Revival of Zapote (Sagip-Ilog)**

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University of Perpetual Help System  
Philippines

Zapote River stretch from Molino Dam and its upstream portion up to Paliparan, and its south-southeasterly branch towards Almanza, Las Piñas, Metro Manila to Barangay Longos, Bacoor. It serves as the boundary between the municipalities/cities of Las Piñas, Metro Manila, and Bacoor, Province of Cavite; and is one of the rivers which has been identified to be heavily silted and polluted.

This river has been extensively damaged and rendered unproductive due to erosion and is choked by industrial waste and trash being dumped into the river by the populace living along and near its banks. Non-biodegradable objects such as plastics, empty cans and bottles are common sight on the river which debouches into Bacoor Bay/Manila Bay.

This project was geared towards the revival/rehabilitation of Zapote River. It was objectively designed to provide for a wholistic approach in the control of environmental pollution through the implementation of reasonable and acceptable standards for environmental quality. The formulation of the project was premised on the following grounds:

1. The Zapote River is heavily polluted due to the industrial waste and large volume of illegally dumped garbage and refuse coming from residential areas, factories and industrial complex.;
2. That the hazardous waste/pollutants carried by the rivers debouching on Manila Bay/Bacoor Bay maybe responsible for the seasonal occurrence of Red Tide organisms;
3. That during heavy rains, flooding and low-lying areas in several barangays in Las Piñas and Bacoor is a common occurrence due to its silted condition; and
4. That the rehabilitation and revival of Zapote River is in line with the government's "Clean and Green Campaign".

An integrated and coordinated approach was introduced by the local officials of the municipalities of Bacoor and Las Piñas headed by their respective Mayors in revising/rehabilitating Zapote River in coordination with DENR, DPWH, CHED-University of Perpetual Help System and NGOs for maximum efficiency and economy.

The financial requirements include: wages, supplies/materials, reforestation (seedling & planting), transportation/ maintenance, and chemical/water analysis.

### **The role of the university in the community**

*Sujit Kumar PAUL*

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India

Education is one of the essential necessities of human kind. Education from the very beginning has been considered to be of vital importance in the context of development of individuals as well as effective

functioning of society. Education equips one with knowledge and analytical capacity to understand the different situations that one experiences and provokes a sense to adjust according to requirements. Promoting education for the purpose of improving the quality of life must get priority in our national agenda.

Any university being the highest level educational institution is considered with production and dissemination of knowledge needs to be socially relevant and useful. It is, therefore, necessary that a university must direct all its pursuits in a manner that synergies promotion of the multifaceted but integrated development of a health society. Traditionally, universities in India were concerned with teaching and research only as the widely accepted function of the university is dissemination of existing knowledge as well as extension of the frontiers of knowledge through research and creative activity. In addition, a modern university should provide opportunities for a multilevel training system and extension education that will be able to meet the country's needs more effectively and enable a greater number of people to continue to use and develop their skills at different period of their lives.

This paper emphasizes the role of the university in society and in this context, discusses the role of extension education provided by the university in bringing about societal and social changes.

### **La co-construction des savoirs est elle une voie efficiente pour développer les pratiques écocitoyennes ?**

*Jacky GIRAL, Marie Claude CHAMBOREDON, Alain LEGARDEZ*

UMR ADEF  
France

Dans le cadre d'une recherche action initiée par l'Ademe et le Conseil régional PACA nous avons choisi de nous intéresser aux mécanismes d'ordre éducatif qui auraient le plus de chance de faire évoluer les représentations à propos de l'environnement et d'installer durablement des comportements écocitoyens. Pour cela nous avons opté pour l'observation et l'analyse de dispositifs éducatifs « horizontaux », c'est-à-dire se déroulant durablement dans le temps et basés sur le débat et l'échange, qui pourraient constituer des outils de co-construction des savoirs, et que l'on pourrait plus tard comparer à des pratiques plus « verticales » et unilatérales d'éducation, c'est-à-dire plus ponctuelles et basées sur l'extranéité des interventions, telles la communication engageante (Joule) ou le conditionnement opérant (Skinner).

Fondements théoriques :

Le concept de « co-construction » renvoie à la possibilité d'émergence de nouvelles connaissances théoriques et pratiques par l'échange et l'expérimentation au sein de groupes hétérogènes tant au plan des acquis scolaires que de l'expérience sociale. Le savoir de chacun est implicitement reconnu comme ayant une valeur qu'il soit ou non validé par une instance officielle de validation. La co-construction se réalisera ici au sein de groupes composé de personnes aux origines culturelles différentes, d'ages très divers (de l'enfant à l'adulte), de CSP fortement différenciées, les unes étant des spécialistes de l'éducation à l'environnement, les autres étant réputées « non spécialistes ».

La recherche action s'effectue dans le cadre d'un partenariat entre l'UMR ADEF de l'Université de Provence et l'association « Il était une fois la terre » de Vallauris. L'association, dont l'action était jusqu'ici tournée vers les enfants, s'ouvre aujourd'hui aux adultes au travers d'ateliers où chacun apporte son savoir faire et ses connaissances. Les thèmes de ces ateliers tous liés indirectement à l'environnement -sont librement choisis par le groupe d'adultes participant à la démarche et chacun se trouve tour à tour animateur. C'est le principe de l'échange réciproque. En parallèle de ces ateliers des conférences-débats sont organisées sur des thèmes environnementaux, eux aussi fixés ( ?) par les participants. Les conférences-débats réunissent des experts et des adhérents ou participants de l'association. L'hétérogénéité des groupes est la règle. Ainsi se côtoient des scientifiques experts et des citoyens non experts de catégories sociales et de formations très variées.

La répartition des rôles entre l'association et les chercheurs est la suivante : l'association assure son action d'éducation à l'environnement, comme à son habitude. Elle organise et anime les ateliers. Une collaboration plus étroite entre chercheurs et association a par ailleurs été mise en place au niveau de l'animation des conférences débats. Les chercheurs ont en charge la méthodologie de l'étude et la collecte des matériaux (entretiens, questionnaires, enregistrements de séances, contenus des arbres) ainsi que leur traitement. Des réunions régulières entre association et chercheurs permettent de réguler l'avancée de la recherche action.

Les objets de l'étude :

1. L'action de co-construction des savoirs environnementaux à travers:

Les arbres de la connaissance et des petits gestes comme outils d'apprentissage cognitif. Selon son inventeur, Michel Authier « les « Arbres de connaissances » prétendent à un renouvellement des pratiques humaines aussi bien en situation de travail ou d'apprentissage, que dans la vie sociale ou éducative en proposant un cadre de mise en commun des savoirs de chacun, contribuant à une intelligence collective

nouvelle »

- Le dispositif de mobilisation et d'animation mis en place par l'association,
- 2. La participation et l'engagement effectifs de la population concernée,
- 3. Les effets produits sur les représentations et notamment leur remaniement,
- 4. Les résultats en matière de consommation de ressources et de gestion de l'environnement immédiat,
- 5. La durabilité des effets.

Conclusion provisoire :

L'étude (en cours) des entretiens et des questionnaires fait apparaître quelques représentations saillantes de l'environnement. Par exemple l'environnement est souvent envisagé comme synonyme de nature avec ou sans l'homme. Il est aussi envisagé comme un problème de vie commune, de respect. Les occurrences du terme « respect » sont les plus nombreuses. Ce terme est successivement relié à celui de propreté, de souillure (en filigrane), de lien social. Le deuxième ensemble terminologique évoqué a trait aux déchets (tri sélectif). Efficacité de l'information officielle en la matière ou connotation travaillant les comportements ? Il semblerait que la question de l'environnement, une fois évoquée la Nature par essence « inoffensive », rejoigne celle de la dignité et du « vivre ensemble ». Les comportements non respectueux de la propreté s'apparenteraient à des atteintes personnelles dans un contexte de vie « compliquée ». Ce qui semble être dit en première instance est plus la difficulté à trouver un terrain d'entente permettant une vie sociale apaisée ou harmonieuse que le danger mondial, certes évoqué par certains, mais non exhibé en priorité. Dans les propos des personnes rencontrées, l'environnement « c'est ce qui nous entoure » au plus près, c'est-à-dire nos voisins, notre ville, nos logeurs, notre rue, nos moyens de transport, le devenir de nos enfants. L'environnement est un objet très rapidement socialisé et les consignes en matière d'économie, de gestes favorables ont été intégrées. Mais elles concernent plus souvent l'Autre que soi même. La problématique de l'environnement se résumerait elle alors à la fréquentation de l'Autre? Seul l'achèvement du traitement des données en notre possession nous permettra d'y voir plus clair sur ce point. Par ailleurs les entretiens permettent de constater une grande capacité à analyser les problématiques environnementales locales et les suggestions en matière d'amélioration ne manquent pas. Par contre nos interlocuteurs semblent être isolés. Ils manquent eux-mêmes d'interlocuteurs. Le terme « ils » revient souvent pour désigner la puissance publique ou les experts. Autre élément important pour conclure provisoirement : l'environnement est une affaire de précautions personnelle, une attention au reste du monde qui se met en scène en famille. Le groupe de termes « faire attention » revient très souvent comme pour souligner qu'il s'agit avant tout d'une affaire d'ordre personnel qui a tout à voir avec la notion d'éducation. Le rapport à l'environnement est aussi affaire de culpabilité parfois mal assumée, comme en témoigne le recours à l'Autre (ou « aux gens ») pour expliquer ce qui ne va pas. Entre individualisme ambiant et nécessité de prendre conscience de nos interdépendances il y a là très certainement un conflit non résolu que les situations vécues ont tendance à accentuer.

### **Socio-Economic Use of Wetland Resources: A Case Study from Kusa and Dunga Swamps around Lake Victoria, Kenya**

*Mercy MWANIKA, Philista MALAKI*  
Kenya

The value of papyrus *Cyperus papyrus* in the past has not been fully recognized globally and especially around Lake Victoria region. Despite the importance of Kenyan wetlands in sustaining rural livelihoods, widespread drainage and habitat degradation has occurred. In this paper, we examine the important factors contributing to unsustainable levels of resource use and habitat destruction in the swamps surrounding Lake Victoria in western Kenya. Results indicate that, a lack of awareness of the hidden costs of wetland drainage amongst rural householders and information failure among others contributes highly to misuse of swamp resources in swamps fringing Lake Victoria. High population densities and resulting land pressures have led to considerable translocation of rural householders, which has contributed to breakdown of collaborative management. Previously, many swamps were considered to be under common ownership and individuals co-operated, but recently property rights structures have shifted to open access where individuals pursue selfish strategies. Large areas of the two swamps have been altered to other forms of land use namely settlement (52.7%), industrial development (22%) and agriculture (25.3%). Multipurpose use and conservation of these wetlands should be viewed with the context of equity and sustainable development. Alternative sustainable development options have been studied to be significant. Some of which include recreation and eco-tourism, research, business, educational sites, horticulture and agro forestry. The swamps can be utilized sustainably through value addition techniques of swamp products. These results show the role such wetlands valuation can play in improving environmental quality. Local involvement and participation should be present in all stages of their management. It is envisaged that the project results will provide framework for discussion for better utilization of Lake Victoria wetlands.

## Video presentations

Room: V106

### **Paroles de Paysans**

*Michel PIMBERT*

International Institute for Environment and Development, London  
UK

Le film que je souhaite montrer s'appelle 'Paroles de Paysans', une coproduction entre IIED-BEDE et Dja Comm. Idriss Diabaté est le réalisateur de ce film dont la durée est de 1 heure.

Le film (en français) présente le déroulement de l'Espace Citoyen d'Interpellation Démocratique (ECID) - un jury citoyen unique en Afrique de l'Ouest sur les Organismes Génétiquement Modifiés (OGM) en relation avec l'avenir de l'agriculture au Mali. L'ECID a été un événement officiel qui a été réalisé sous les auspices du gouvernement régional – l'Assemblée Régionale de Sikasso.

Ce film documentaire présente les recommandations des 45 productrices et producteurs de la région de Sikasso réunis en Janvier 2006 pour auditionner des témoins experts, débattre de choix technologiques et orienter les décisions du gouvernement sur les questions de biosécurité et de développement agricole.

### **People science and local genetics**

*Hannu HYVONEN, Virpi VIROLAINEN*

*Northern Heritage Association  
Finland*

There has been going on an exciting and interesting project to develop again the northern gardening on the basis of the locally existing genetic diversity. We have been taking part on this project as gardeners and documentarists now for seven years. We are interested in exchanging experiences with other similar initiatives in different countries and we are also dreaming about starting to make global document of this kind of activities in different countries.

Organic plant breeding as a basis for sustainable food chain-experiences from Northern Heritage project/ Hannu Hyvönen.

First some common comments on the global strategy for sustainable future. We have been developing this oil based culture now about hundred and fifty years and during next decades we shall meet the cultural revolution, moving to post oil era. There is not to be seen a serious preparation for this enormous big change. This radical change seems to come like a cultural tsunami, which collapses the oil based production and consumption structures of western, industrial civilisation, (look more: <http://elonmerkki.net/kyoto.html> ). At the same time it is quite probable that this ongoing war on oil resources shall continue and deepen in future. This war is a thread for oil production and consumption but also it can threaten by many ways today's globalized food supply. The climate change is the other change which causes threads for food security by changing the farming conditions all over the world. How can human civilisation survive through these threads and changes? The basic principle for surviving are the diversity and localising. Centralized monocultures cannot survive, we need localized diversity in farming but also in all kind of economics and specially in energy production.

In this presentation I focus on the genetic diversity and our ways to control, use and develop that heritage as a basis for sustainable food chain. The diversity of species is the capital by which ecosystems can adapt on changes and the genetic diversity of every one species is the capital by which it can adapt and survive in changing environment. This principle is true also in agroecosystems. We need all possible species which we can use in our agriculture and with them we need to develop diversity on fields instead of monocultures. The multi species diverse agroecosystems are more sustainable against pests and diseases but they also increase the food security. If there are many crops species on the farm there is more probability that some of them give some production also in difficult years.

But we need also to stop the genetic erosion of crop species which has collapsed the amount of varieties among crops. The sustainable food chain is build on the ground of genetic diversity which is serving the local needs. This was the situation before the second world war and towards this we have to go again. We need localized control on producing the genetics which farming needs, plant breeding is to take from corporations and institutions to the hands of farmers and consumers networking.

We need localized control on producing seeds and other propagation material. On the ground of these steps can be build the rest of sustainable food chain.

In Finland we have started this kind of process with fruit trees and berries, a local initiative to develop plant breeding and propagation for the needs of northern Finland and organic farming.

Before 1950's there were many hundreds of local apple tree varieties which were propagated by traditional cloning method, crafting. But when coming to 1990's the amount had collapsed to about 15 varieties. In the end of 1990's we started a project in Northern part of Finland to seek these old varieties among old, still existing apple trees. Besides these old cloned varieties we found enormous amount of individual and unique seed trees with good qualities. By selecting among them the best one we have now produced for local use tens of new local varieties and we are sure that the limit of commercial apple growing in Finland can be lifted many hundred kilometres North by them.



**Friday, the 31<sup>st</sup> of August – Vendredi, 31 septembre**  
**Plenary**  
from 14.45 to 16.00

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## Plenary

### Amphithéâtre Poincaré/ Elie de Beaumont (L108/L118)

Chair: Catherine Bourgain, Fondation Sciences Citoyennes

with

#### **=> Hamed Ibrahim El-Mously: The Endogenous Development: An Approach To The Resurrection Of The Civil Society**

Chairman of The Egyptian Society For Endogenous Development of Local Communities, Cairo, Egypte; member of the Executive Committee of INES.

#### **=> Budd Hall and Rajesh Tandon: Research Policy - from local to global**

B. Hall is Director, Office of Community-Based Research, University of Victoria, Victoria, B.C., Canada. R. Tandon is the director of the NGO Participatory Reseach in Asia (PRIA, based in India). The both are pioneers of the participatory action research.

**Friday, the 31<sup>st</sup> of August – Vendredi, 31 août**  
**Parallel Session 2**  
from 16.30 to 18.30

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## 2.a University engagement with communities – Knowledge dissemination issues

*Le rôle de la dissémination du savoir dans les coopérations entre institutions scientifiques et collectifs citoyens*

Room / Salle : L213

Chairperson / Président de session :

### **The role of knowledge mobilisation in the development and sustainability of community-university research alliances. A Canadian example.**

*Kathleen BLOOM, Béatrice MOOS*

Canadian Centre for Knowledge, University of Waterloo  
Canada

The primary goal of what we in Canada call Knowledge Mobilisation (KM) is to bring accumulated evidence to bear on decision making in policy and practice. The defining feature of KM is its bidirectional nature in which communities and universities collaborate to make research findings usable.

The Canadian Centre for Knowledge Mobilisation (CCKM) is a nongovernmental organisation created to build tools and capacity for KM. Research findings, as well as information about community-based programs, are gathered, collated, evaluated, and summarised using systematic and transparent methods that can stand the tests of reliability and validity. Our procedures result in cost-free plain language resources such as fact sheets, snapshots, landscapes, and catalogues of studies, research reviews, and programs. CCKM products are developed collaboratively so that they best fit the needs and culture of stakeholders. Examples of knowledge products, as well as university graduate courses in KM, are described in the presentation.

But the primary goal of the presentation is to demonstrate ways in which KM activities can be used to enhance the internal lives of community-university research alliances (CURAs). We will give examples of the usefulness of KM at three points in the alliance: development, maintenance, and accountability. Using examples of university partnerships with community service groups, policy researchers, and practitioners, we will argue that KM activities embedded in the development of CURA proposals increase the likelihood of success in funding competitions. Evidence of KM underlines the strength of the research strategy and partnerships described in proposals. We will use examples of projects in education, language development, and literacy from across Canada and across sectors.

Once a project is initiated, KM activities can be used to manage and grow the CURA. For example, research knowledge products help community groups increase their credibility as evidence-based endeavours, increase funding support, and increase commitments to research in organisational strategic planning. Knowledge products can also be used to demonstrate university engagement, and to bring new partners to the alliance.

Finally, KM products can be used to demonstrate CURA outcomes. We will show how a novel method of required reporting to government became a promotional tool for community partners rather than just another reporting obligation. We will also show how students, policy analysts, and practitioners played critical CURA roles in the development of KM products. By working together, KM and CURAs make useful research and make research usable.

### **Making nanotechnology visible: communication, participation and symbolic appropriation.**

*Jose Manuel de COZAR ESCALANTE*

Department of History and Philosophy of Science, University of La Laguna - Tenerife  
Spain

The scope of research and innovation in nanotechnology is growing both in terms of investment and applications that are either in development or already at market. However, informing the non-expert public about these advances is no easy task for various reasons, the majority of which have to do with the invisibility of nanotechnology. This invisibility can be understood in different ways: the extraordinarily small scale at which this work takes place (nanoscale), the difficulty in understanding the scientific theories on which they are based, the little effort put into communication by experts in this field, the secrecy of some areas of research (military, national security, private sector), the abuse of hyperbolic rhetoric used in favor

and against nanotechnology, the lack of “star” products in the market, etc.

The fact that the general public is not receiving sufficient information about nanotechnologies is dangerous because of the hostile reaction that they may receive if their applications become visible in an inadequate manner –an eventuality that greatly worries their promoters – or if these technologies are undemocratically imposed without public debate and transparent decision making, given that the social and environmental impact of these applications would unquestionably be highly visible and significant. Nanotechnologies need a proper cultural adaptation or social representation, the construction of a social imaginary based on public participation and not imposed. There are more or less efficient formulas that can be implemented to allow nanotechnologies to become visible to the social sphere in a democratic fashion.

The only way that non-experts will be able to understand both a nanotechnology and the ethical dilemmas that it can provoke is if there is genuine democratic participation in the process of production and social diffusion of said nanotechnology. While these enormous problems remain unresolved, the social legitimacy of nanotechnology – just as with all modern technology – will remain in doubt for the foreseeable future.

### **The Multicultural Dialogue as a Best Practice for University Engagement With Communities: Indian Experience for Sustainable Agriculture.**

**S. ANANDKUMAR**

Pandit Jawaharlal Nehru College of Agriculture & Research  
India

Making comparisons between knowledge systems based on the worldview of professionals trained in western science is very risky as many knowledge gaps and judgements could be built in. In knowledge / technology prospecting in fact a similar approach is followed but with judgement of what could be useful in professional's own system. This way of comparison, however, will not lead to improved understanding of the differences and similarities between the world visions and logics behind the different systems which is needed in inter-cultural dialogue and education. In the context of agriculture, there are different worldviews held by Marginal farmers, Market farmers, Western agriculture, Vedic agriculture and Tribal agriculture, Hindu, Buddhist or other religious scripts or traditions. All these different categories of farmers are in problem.

However, they can learn from each other, for example on rice cultivation. If we want to come to deep understanding of the differences and similarities between varied knowledge systems each system should be represented by its knowledgeable owners to avoid biases and judgements. In a college context, one could create several student groups with different cultural backgrounds, Vedic (with sub-division in different castes?), specific tribes, and westernized-secular. Each group could bring some knowledgeable elders, sages or scientists. One has to agree on objective (intra- and multi-cultural learning/education?) framework and strategy for systematic discussion.

Each group should try to explain and document its own knowledge on (specific aspects of) agriculture and its ways of knowing / learning / '\researching', starting from its own cosmovision (from which attitudes / values in relation to other people, nature and the non-material world can be distilled), and providing the social, natural and spiritual perspectives on each aspect.

When each group has created sufficient insight in its own knowledge system (or a specific aspect of it) and is able to explain it to others, the multi-cultural dialogue could start with the objective that the students will understand the values, logic, institutions and practices of the other knowledge systems and can jump from one cultural perspective to another. Starting from their own specific context they also could try to understand how their own farming systems / knowledge system could benefit from other knowledge systems without changing the basic principles of their own knowledge system. Coen Reijntjes, one of the International Coordinators of COMPAS network of the ETC Foundation, the Netherlands and the lead author of all-time classic and ever-green memorabilia, “Farming For The Future”, offered the tutelage for the Multicultural Dialogue.

Following the causeway of Coen Reijntjes, and in an attempt to cash in on the potentials of diverse knowledge systems specifically for collective construction of appropriate knowledge and strategies for promotion of endogenous organic rice production for farmers, a pioneering attempt was made to organize a multicultural dialogue with key stakeholders and experts on organic farming from interestingly diverse cultural groups. Seldom groups of the sort are assembled for decision making at local level for it was extremely challenging to offset tradeoffs in getting together distinctly different and drastically divergent cultural

representatives. The multicultural group was comprising farmers naive to organic farming, farmers in transition to organic farming, members of organic farmers organization, presidents of civil society organizations, manager of large scale organic farm, organic product traders, N.G.O specialists, organic farmer in politician cum local government representative, extension specialists, scientists from universities, scientific officer of regional centre for organic farming (donor), director of department of agriculture, member of the legislative assembly, and the chief secretary to the government and also students.

These cultural groups encompassed various religions and castes as well. This multicultural community was mobilized especially for the specific objective of evolution of appropriate knowledge and strategies for promotion of endogenous organic rice production for farmers through sharing, comparison, mutual learning and co-evolution, consensus building and collective construction of appropriate knowledge from diverse knowledge systems of various cultural groups. Thus the multicultural dialogue can be replicated in similar socio-economic-politico-environmental contexts for production of appropriate knowledge from multifarious bio-cultural knowledge systems.

### **Making risk information on local air quality better accessible**

*Manon VAAL, Marga JACOBS*

Science Shop for Biology, Utrecht University  
The Netherlands

In the Netherlands air quality is a major concern due to the high levels of air pollution, mainly caused by traffic and industrial activities. The health risks of air pollution provoke a continuous societal and political debate. Citizens worry about the impact of living near freeways and want to know the level of air pollution at the places they live and work.

Citizen group Leefmilieu has put the local air quality issue on the policy agenda in the Netherlands for more than 10 years already. The volunteers of the association get a lot of questions from individuals and local community groups about air pollution levels and the related health impacts. People want to take informed decisions about where to live a healthy life in relation with, for instance, the amount of traffic and the distance to freeways. However, data on such a local scale are hardly available from local authorities. Although European directives oblige local authorities to provide these data they are very hard to get and certainly not easy accessible. Furthermore, citizens demand these local data in relation to health risk information and these are not available at all.

The Science Shop for Biology is confronted with similar questions of individuals. Due to the specific characteristics of each situation no general answers can be produced. Because of the ongoing societal and scientific debate on air pollution and air quality standards in the Netherlands Leefmilieu en the Science Shop for Biology worked together on a project directed at the improvement of information service towards citizens. Purpose of the project was to present an overview of current available air quality information and possibilities to map this information to a local scale to fulfill information needs of citizens. The project has been carried out with input from both societal groups (defining needs) and scientists (defining scientific possibilities and limitations).

In the presentation results of this project will be discussed, focusing on science-society interaction, the need for trustworthy and comprehensible risk information, future development of the tool and possibilities to export the tool to other regions/countries.

### **An allocation model for Science Communication**

*Ilse De Bal*

Vrije Universiteit Brussel  
Bruxelles

We present and discuss a model to finance a portfolio of science communication activities in higher education in Flanders, Belgium, in which Science Shops have their share. The model starts from an initiative of the Flemish government to fund such a portfolio.

Flemish Science Shops are embedded in Science Communication and financially supported by the Flemish Government. As of 2008, a new model for financing Science Communication in higher education

involving more partners- has to be developed. Therefore, a primarily discussion of an allocation model had to be conducted.

However, before starting to create an allocation model, we need to have a clear view of the concept of Science Communication. Which activities belong to Science Communication and what is rather pr/communication or student recruitment? What are the criteria involved in science communication and how broad or how narrow should this be defined? What are quantifiable parameters? How much of the science communication is dialogue, how much involves scientists as well as citizens, and how much is one-way communication? We'll comment on the different parameters (such as research staff, projects, publications, specific public events) and clarify why these parameters should be considered as reliable indicators within an allocation model for Science Communication.

## 2.b Science Shops in post socialist countries

### *Les boutiques de sciences dans les pays post socialisme*

Session jointly submitted by all speakers

**Room / Salle : L224**

Chairperson / Président de session : **Richard Worthington**, Pomona College & Loka Institute

### **Situating Science Shops in the contexts of globalisation**

*Richard WORTHINGTON*

Pomona College & Loka Institute

U.S.A

This workshop connects two transformations. The first is the transformation in the international Science Shop network as it encounters societal circumstances very different from those in the places of its origin. The second is the transformation in post socialist countries that are one of the new sites for Science Shops. The confluence of these two transformations in the post socialist countries creates an exceptionally dynamic and challenging space for participatory research practices and policies. The experiences in this space are new ones for the Science Shop network and post socialist countries alike, so the workshop should interest observers of post socialist countries as well as people interested in the changing characteristics and roles of Science Shops.

Our specific cases are from the Czech Republic, Hungary, and Romania. Their unique setting for participatory knowledge practices and policies is most readily appreciated in comparison with similar developments in the rest of the world. In Europe, the invention of the original Dutch Science Shops was largely the product of student movements for socially-responsible universities, whose concerns resonated with a governing coalition elected in 1973 on a campaign theme of “equal distribution of income, wealth and knowledge.” The Netherlands was an ideal environment for these developments because of its deeply rooted “polder culture” of consultation and accommodation among social groups. By the early 1980s, Science Shops had been started in at least seven of western Europe’s social democracies.

Participatory practices emerged at the same time in North America where political cultures are more individualistic, but civil society institutions are very highly developed. While these participatory research efforts generally lacked the orderly concept of a “shop” at universities where community groups could apply for research collaboration, many were based at universities. Those that were not usually had significant connections with universities through the participation of faculty, students and staff in the social movements of the time.

Finally, participatory practices in the global South also developed in the 1970s from a similar political impulse that sought alternatives to the failures of mainstream development assistance and support for postcolonial government initiatives. The material support for this strand of participatory research came from newly decolonized states such as Tanzania, as well as official and philanthropic development programs based in the social democracies of western Europe and Canada. Scholars from both the North and South were typically involved in these projects.

In this global context, the most obvious difference facing Science Shops in the post socialist countries of Central and Eastern Europe (CEE) is that civil society organizations, whose concerns Science Shops ideally would address, were repressed to the brink of extinction under socialist rule. Despite regime change, most have not developed the political and organizational capacity for collaboration. In part, this reflects the decidedly mixed blessing of the post socialist transition. On the one hand, there is greater freedom for association; on the other, the prospect of exercising this freedom is impaired by the erosion of traditional social ties that had survived the socialist period, as well as the erosion of other solidarities that formed during the socialist era as underground movements. Along with the advent of consumerism, growing inequality, organized crime, and other accoutrements of globalization, these factors comprise a rather barren social environment for participatory research practices.

Nonetheless, the new Science Shops in this region have met with initial successes in linking university resources with community and regional needs, and additional shops are now on the drawing boards. What accounts for these successes? How sustainable are they? If civil society in CEE is weak, is it

plausible that Science Shops might contribute to its development?

The workshop will focus on the mutual influences between CEE Science Shops and research policies and practices at the local, regional and international levels. While much of the CEE Science Shop experience mirrors participatory research practices elsewhere, we will focus on those that appear to diverge. For example, universities in CEE for the most part are attended by students from their immediate region. Given the weak and externally-dependent nature of NGOs in the region, students have often been the link to communities. Does this practice dilute the intention that Science Shops respond to civil society concerns, or is this instead an inventive means of helping develop a stronger civil society? Another issue is modernization: much of the cultural and political impetus for earlier participatory research movements drew on dissatisfaction with the modernist paradigm as reflected in universities and international development programs. Is the modernization to which CEE Science Shops aspire the same as what was rejected 30 years ago in western Europe and North America? A similar question arises concerning private enterprise.

Established Science Shops are designed to provide research for civil society groups who lack the resources to do it themselves. Are CEE Science Shop collaborations with industry and SMEs a dangerous deviation from the Science Shop model, or an appropriate application of it in new circumstances? How do existing research policies influence or shape the practical answers to these questions? How can practical innovations by Science Shops be translated into research policies at the local, regional and international levels?

This workshop includes presentations by staff at four Science Shops in the Czech Republic, Hungary and Romania. They include scientists with significant experience at universities during the socialist era, who thus have worked under radically divergent modes of science in society over the course of their careers. In addition to the Science Shop staff, two Science Shop veterans from other regions (one Dutch, one American) who have participated in the Central and Eastern European developments will make presentations at the workshop.

### **The role of the Science Shop from the University of Oradea on behalf of Community Based Research in the north-western part of Romania, present and future in the European perspective.**

*Diana CUPSA, Ilie Catalin TELCEAN, Ellenés ZOLTAN*

University of Oradea  
Romania

The Science Shop for Biology from the University of Oradea is the only one active in the north-western part of Romania, which activity covers especially environmental research themes, regional development and medical ones. Some of the themes are transboundary, so we have international cooperations with other UE countries (Hungary in this stage). Our european perspectives are concerned about the involvement of the Science Shop in the supporting of the local community in the field of protection of the natural values in european police context. On the other hand the Science Shop is involved in the regional development by elaborating project proposals focused on fund raising for the local community development.

### **From a Science Shop in Hungary : a Science-society interface through Science Shops**

*Balint BALAZS*

Szent Istvan University  
Hungary

### **From a Science Shop in Romania : Science Shops in the context of regional environment research**

*Lucian P. GEORGESCU*

University "Dunarea de Jos" Galati  
Romania

**From a Science Shop in the Czech Republic : Comparison of knowledge transfer under the socialist regime and through Science Shops**

*Jiri and Vlasta HOLAS*

EDUCO CZ

Czech Republic

**Environmental movements and Science Shops in Central Eastern Europe**

*Arie FOKKINK*

*Green Grid Consultants*

*Netherlands*

**2.c Participatory processes – realities, experiences and limits***Processus participatifs – réalités, expériences et limites***Room / Salle : V106**Chairperson / Présidente de session : **Claudia Neubauer**, Fondation Sciences Citoyennes**Les étapes de la démocratie dialogique***Fernand DORIDOT, Martine REVEL*

ICAM de Lille et CETS

France

Dans un article fameux, '*Des différentes formes de démocratie technique*', paru pour la première fois en 1998 dans les Annales des mines; Michel Callon proposait de distinguer trois modèles de démocratie technique. En très gros ceux-ci se différençaient par le degré de coopération qu'ils impliquaient, dans le domaine scientifique et technique, entre des « experts » (spécialistes traditionnels de ces questions et habituellement leurs seuls dépositaires) et des « profanes » (jusqu'à présent mis à l'écart de ces problèmes, mais trouvant dans leur concernement par ces questions une forme de légitimité à la participation qui ne pouvait plus être ignorée).

Parmi ces trois modèles celui de la 'co-production des savoirs' était le plus élaboré, et est souvent promu depuis au titre d'idéal à atteindre (le titre donné à la présente conférence nous semble d'ailleurs en être un exemple supplémentaire). Dans son article M.Callon insistait majoritairement sur le champ des savoirs, mais cette co-production recherchée semblait pouvoir concerner également le champ des décisions (les rapports entre ces deux champs, et l'usage d'arguments relatifs tantôt à l'un, tantôt à l'autre, nous semblant d'ailleurs devoir bénéficier, dans l'article même de M.Callon, d'une analyse et d'une reconstruction attentives). Notre propos sera ici d'apprécier la pertinence de ces trois modèles pour une analyse des relations à l'oeuvre, dans le cadre des débats publics de type 'CNDP' (et en nous basant sur l'exemple de débats publics autour de projets autoroutiers qu'il nous a été donné de suivre), entre les différents types d'acteurs impliqués (ingénieurs de l'Etat, élus, experts scientifiques, associatifs, riverains, etc.). Nous nous concentrerons essentiellement sur le champ des savoirs, la question de la décision nous semblant, dans le cadre de tels débats (du fait même d'ailleurs de leur organisation procédurale, et du moment où ils prennent place dans le déroulement d'un projet), fonctionner davantage comme un pôle de référence (certes déterminant) que comme un objet effectivement débattu.

Nous chercherons en particulier à isoler le type de thèmes sur lesquels une authentique co-construction de savoirs peut être atteinte à l'occasion de tels débats, et nous essaierons de montrer comment, à l'occasion de certains thèmes, les deux autres modèles peuvent se révéler assez pertinents et ne pas mériter une excessive déconsidération. Nous tenterons également de préciser les dynamiques existant entre les différents modèles, et d'isoler les facteurs susceptibles de déterminer le passage, dans le temps d'un débat, de l'investissement d'un modèle à un autre.

**Science, technology and civil society (STACS) – Civil society organisations, actors in the European system of research and innovation***Eric GALL*

Fondation Sciences Citoyennes

France

The established regime of production of knowledge has in the late 20<sup>th</sup> century entered into crisis. The rise of nuclear protests and environmental awareness (climate change, biodiversity...) and the advent of several catastrophes (Chernobyl, "contaminated blood scandal" in France, ESB crisis in Great Britain, asbestos, etc .) have turned our societies into a "risk society", where human-made risks associated with scientific-technological developments are pervasive in the public sphere and in the construction of identities. The former consensus for simple "progress" has therefore been replaced by a strong societal demand for precaution and for participation in the decision making on the socio-technical issues. Science is seen as both a source of problems and of solutions. Civil society organisations are rising as major players in domains such as environment, health, energy, agriculture, climate, ecology, international solidarity, gender, social exclusion and immigration, disability and poverty, both at local levels and at European and global levels.

These non-profit and public-interest oriented organisations have become important knowledge

producers (World Wildlife Fund and endocrine disruption; Öko-Institutes in Germany, Austria and Italy; CRIIRAD – Commission de Recherche et d'Information Indépendante sur la Radioactivité in France and radioactive pollution; the organisations of the AIDS movement and co-production of clinical protocols; Medecins Sans Frontières and Drugs for Neglected Disease Initiative). Indigenous people, amateur naturalists or farmers' organisations are now seen as key actors in the conservation of biological diversity, and numerous peer-to-peer cooperative innovation processes (Free Software, Wikipedia, Tela Botanica, etc.) are known. A third sector of knowledge production and innovation (beyond the state and market sectors) has thus strongly emerged within Civil Society.

There is a growing awareness that scientific knowledge is crucial but has to be democratically oriented in public interest perspectives to meet the challenges our societies and our planet are facing. Public science and technology policies have developed many instruments and have given strong support to stimulate academia-industry R&D partnerships. New science and technology policy instruments should therefore in the future:

- involve civil society in the definition of research agendas to enhance research legitimacy. (e.g. participatory methodologies)
- involve not for profit actors (CSOs) as potential partners of R&D. Such new partnerships have only developed in the recent years (e.g. *Community University Research Alliances* (CURA) in Canada; *Partnerships Institutions-Citizens for Research and Innovation* (PICRI) programme of the regional government of Ile-de-France.)
- support *Science Shops*, small entities providing « independent, participatory research support in response to concerns experienced by civil society » in a wide range of disciplines, and usually free of charge.
- support *Community based research* (CBR) taking place in community settings and involving community members in the design and implementation of research projects. It aims at elaborating research processes and outcomes that directly benefit communities. Community members should be empowered to initiate their own research projects which address needs they identify themselves.

Our European project (contract 044597; 6<sup>th</sup> Framework Programme, Work Programme "Science and Society", Call FP6-2005-Science and Society-19) intends to strengthen the research capacities of civil society in proposing capacity building sessions, common research projects „nursery“ workshops with NGOs and researchers, a website ([www.citizens-science.org](http://www.citizens-science.org)) and policy meetings.

### **EcoGenEtic.Com: an integrated research experience to translate social and scientific priorities into strategic guidelines for the management of agro-biotechnologies at a human scale**

*Floriana MARIN, Lucia MARTINELLI*

Instituto Agrario di San Michele all'Adige  
Italy

Facts and social studies provide evidence of a widespread European citizens' need for thorough scientific knowledge on the risks and benefits of gene technology. In particular, public debate on biotechnology shed light on the institutional requirements of

- (i) providing citizens-consumers with proper criteria for exercising informed choices,
- (ii) developing guidelines for scientific research and communication responsive to the priorities expressed by the public opinion, and
- (iii) identifying the most effective practices for the government of the technology transfer from laboratories to society. As a response, we are engaging ourselves in a stimulating research project that we called EcoGenEtic.Com to emphasize its peculiar characteristic of interdisciplinarity. Accordingly, the project brings together into four thematic work packages the expertises of ECONomic and social sciences, GENetics, bioETHICS, COMMunication and dissemination of scientific results. The final goal of the project is to promote a thoughtful approach to environmental questions, biological risk management, and other issues that as a whole affect the relationship between science and society when gene transfer techniques are drawn into debate.

Accordingly, laboratory research in EcoGenEtic.Com aims at answering the social request of reducing risk in biotechnology through the detection and assessment of “clean” tools (i.e., the elimination of

the antibiotic resistant genes, or the transfer of alternative marker genes). Moreover, scientists' approach to risk management is studied by personal interviews, while ad hoc questionnaires have been administered to monitoring consumer attitudes toward different kinds of genetically modified food. An intensive research work in the field of bioethics have been done to understand in depth the meaning attached to concepts such as "sustainable development" or "eco-friendly" and their implications for the scientific research and risk management. Active participation to the results of the project was ensured thanks to the organization of thematic workshops for students and lay citizens, *café scientifique*, and public conferences. Finally, an important phase of EcoGenEtic.Com involves the participation of the junior researchers from the four work packages into multidisciplinary discussions and activities concerning the project topics, in order to work out strategic guidelines for a good scientific communication, i.e. a kind of communication which would be able to get over intradisciplinary perspectives and take the scientific debate into society with an holistic approach. This research is supported by Autonomous Province of Trento, Project.

### **The project CIPAST – Citizen Participation in Science and Technology**

*Norbert STEINHAUS, Esther LUCCIOLA*

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CIPAST is a FP6 funded project which started its activities in April 2005. Main objectives of CIPAST is to raise awareness for participative procedures and discuss their relevance for democracy throughout Europe and disseminate expertise and good practice among the participants and the general public. Various tools such as discussion lists; website, newsletter and the CIPAST database which have been developed during the first project periods, were brought into action to enable and support dissemination of best practice and interaction between actors.

The CIPAST database, which is accessible via the CIPAST website, will be an important tool for future networking. Already listed are 331 institutions from 16 countries, describing 146 participatory processes from 21 countries. Actors are asked to submit their contact data to expand networking and share their expertise in the field of citizen participation in science and technology.

Based on the experiences and outcomes of two training workshops (2006 and 2007) including a variety of participatory processes' case studies the CIPAST consortium will produce a training package, available through its website, for further training initiatives.

The presentation will give an introduction to the several activities and tools of and developed and offered by the CIPAST consortium.

### **European Public Participation in Agbiotech Assessment: Contesting Science/Policy Boundaries**

*Les LEVIDOW*

Open University, Faculty of Technology  
United Kingdom

European decision-making on techno-scientific issues has encountered public suspicion and legitimacy problems. These have resulted from government policies promoting specific technologies with normative commitments to specific futures. The consequent difficulties have been interpreted through various 'deficit' models in mainstream policy discussions. Initially the problem was diagnosed, for example, as inadequate public knowledge, or as inadequate public rationality. Later diagnoses emphasised inadequate 'risk communication', or inadequate regulatory frameworks, or inadequate institutional capacity to address public concerns. Elaborating the latter diagnosis, 'risk governance' aims to make institutions more trustworthy, to make decisions more publicly accountable and to accommodate conflicting goals, especially through broader participation and deliberation. Given widespread public concerns over agbiotech in particular, state bodies across Europe have sponsored various participatory exercises in which citizens assess expert claims.

In this paper, 'risk governance' provides a heuristic device to analyse the experience of citizen participation in assessing agricultural biotechnology. The paper draws on critical analyses of high-profile cases: the 1987 consensus conference in Denmark, its 1994 counterpart in the UK, likewise 1998 in France,

and the larger-scale 'GM Nation?' in 2003 in the UK. The paper identifies general patterns among those quite different examples.

These participatory exercises generally internalised assumptions about agbiotech as societal progress, while displacing deeper conflicts into regulatory issues. Some participants sought to open up the normative basis of technological decisions, especially vis à vis alternative futures, but such efforts were marginalised. Despite aspirations to democratise technological choices, the exercises tended to biotechnologise democracy.

These exercises have stimulated or reinforced greater public accountability for regulatory criteria, but not for innovation choices. Pervasive tensions have arisen between discussing a 'common' problem – e.g., how to make agbiotech safe or acceptable – versus containing conflicts around the problem-definition for societal needs and technological decisions. These tensions have taken the form of boundary disputes – between policy issues versus scientific issues, between social versus technical issues, as well as between lay versus expert roles – thus performing different models of the public. These dynamics can be analysed by linking several analytical perspectives: critical theories of technology, deliberative democracy, performative roles and neoliberal governance.

**2.d The social commitment of scientists***L'engagement social des chercheurs*

Room / Salle : V107

Chairperson / Président de session : **Phil Nyden**, CURL of Chicago**Chercheurs – agriculteurs – industriel Co-construction d'une filière de cacao fin et « bio » en Équateur***Investigators – farmers – industrial: co-construction of a supply chain of high-quality and organic cacao in Ecuador**Michel DULCIRE, Gilles ROCHE*CIRAD Environment and Society, UMR Innovation  
France

Les variétés locales de cacao d'Équateur possèdent un fort potentiel aromatique, reconnu historiquement. L'introduction de nouvelles variétés en réponse aux besoins de quantités importantes a rendu cette qualité du produit très aléatoire.

Dans un premier temps un chercheur s'intéresse au cacao fin, dans le cadre d'un projet de développement financé par l'Union Européenne. Il s'y implique en association avec une organisation de producteurs, et dans ce cadre fait des « découvertes » sur le cacao aromatique d'Équateur dont les premiers résultats seront confirmés scientifiquement. Les agriculteurs veulent alors valoriser ce segment de marché. Intervient un industriel chocolatier dont les convictions le portent à s'engager dans des filières de cacao fin, en agriculture biologique. Les deux parties élaborent en commun un contrat, dont ils s'engagent à respecter les termes.

Dans cette communication nous proposons de caractériser comment, en réponse à la demande du chocolatier, le chercheur (la recherche) s'est engagé. Son institution de recherche le désavouera pour travaux « non-conformes » aux règles en vigueur à l'époque, hors station et avec des paysans. Nous rendrons compte de la manière dont, après et malgré ce rejet « scientifique », il s'impliquera donc dans la construction d'un partenariat entre l'organisation de producteurs de cacao et l'entreprise chocolatière. Nous y analyserons l'évolution de la demande et de la démarche de chacun des acteurs lors du long processus de mise en place du dispositif, dans l'élaboration ainsi que la place et le rôle de la recherche, pour co-construire cette filière.

Nous avons caractérisé les différentes étapes de cette action au moyen d'enquêtes compréhensives menées auprès des producteurs et de leurs associations, de la recherche internationale et nationale, de l'industriel chocolatier, et des bailleurs de fonds internationaux. Nous rendons compte des premiers acquis pour la recherche : le développement de concepts et d'outils, les engagements que la recherche et ses partenaires ont réussi à co-construire, qui répond aux intérêts de chacun et confère à cette filière une durabilité prometteuse.

**Développement et évaluation environnementale des techniques sans labour en France : quelles formes d'intégration de l'expérience des praticiens ?***Frédéric GOULET, Fabrice DREYFUS**Presentation by : Frédéric GOULET*INRA SAD, UMR Innovation and Sup'Agro Montpellier, UMR Innovation  
France

Cette communication vise à présenter et analyser l'évolution des relations entre profession agricole céréalière française et recherche agronomique, sur fond d'innovation technique, de controverses environnementales et de recomposition des identités professionnelles. Nous nous appuyons sur l'étude des réseaux de développement de l'agriculture « de conservation », basée sur l'abandon du labour et la mise en place d'une couverture végétale permanente du sol (techniques de semis direct). Nous mettons en évidence les relations conflictuelles entre un ensemble d'acteurs engagés (agriculteurs militants, agrofourniture) et le système de R&D agricole français, les rôles joués par des scientifiques aux statuts particuliers, et l'émergence de nouveaux modes de coordination entre ces acteurs.

Dans le prolongement d'une simplification du travail du sol visant à réduire leurs coûts de production, des agriculteurs français tentent de développer depuis la fin des années 90 les pratiques de semis direct qu'ils ont découverts sur le continent américain (USA, Brésil, Argentine). Ils tissent dans ce cadre des liens privilégiés avec des scientifiques en marge de l'appareil officiel français (agents du CIRAD partisans d'une recherche-action, ancien microbiologiste de l'INRA devenu indépendant, chercheurs étrangers), afin de pallier au faible intérêt initial des chercheurs et vulgarisateurs nationaux. L'engagement double de ces scientifiques, dans la conception des systèmes de culture et l'étude des mécanismes biologiques à l'œuvre, en font des partenaires privilégiés des praticiens innovateurs et d'un segment professionnel émergent. Ils incarnent la figure d'un scientifique proche des débats techniques de la profession, tout en étant tournés vers des réalités internationales.

En marge des circuits classiques de développement, agriculteurs pionniers et agrofourniture s'organisent alors au sein d'association et de réseaux comme la FNACS (Fondation Nationale pour une Agriculture de Conservation des Sols), ou BASE (Bretagne Agriculture Sol et Environnement), dont les noms témoignent d'une volonté de se positionner dans une approche environnementaliste. Ces organisations ont une double fonction : créer des réseaux d'échanges d'expériences entre des pairs isolés localement, et défendre la cause de l'agriculture de conservation auprès de la R&D et des décideurs. Il s'agit en effet de démontrer, sur le long terme, aussi bien la faisabilité technique de ces systèmes, que leurs performances environnementales. Les incertitudes sur les quantités de carbone stockées dans les sols, mais surtout les controverses sur l'usage a priori accru d'herbicides totaux comme le glyphosate, amènent ainsi ces acteurs sur le terrain de l'administration et de la contestation de la preuve scientifique. C'est en effet pour les agriculteurs, suite aux crises environnementales des années 90, la reconnaissance par la société et par la R&D qui est au cœur de ces débats ; pour les industriels de l'agrofourniture, des enjeux commerciaux majeurs sont conditionnés par cette « validation » environnementale.

Nous identifions deux types de démarches alors développées : la contestation de chiffres produits par les chercheurs de l'INRA, en critiquant les protocoles et la nature des situations mesurées (nombre d'années en semis direct des essais, types de couvertures végétales), et la production de contre-expertises effectuées chez les agriculteurs, le plus souvent avec des chercheurs « alliés » du CIRAD. La validité des connaissances produites par les uns et les autres est contestée, car chacun renvoie à l'autre leur caractère situé, attaché à des conditions particulières, en station comme chez l'agriculteur. C'est donc dans ce climat de contestation de la légitimité des dispositifs « officiels » que des projets de recherche, basés cette fois sur des dispositifs hybrides alliant mesures en station expérimentale et au sein de « réseaux de parcelles », ont vu récemment le jour en Bretagne.

Ces dynamiques sont ainsi révélatrices de formes d'intégration de l'expérience des praticiens dans les dispositifs de R&D, déjà mises en avant dans d'autres domaines de l'agriculture ou en médecine. Elles permettent d'éclairer les jeux identitaires et stratégiques qui s'engagent autour de la redéfinition des rôles cognitifs en situation d'innovation entre praticiens et scientifiques, entre experts et profanes, et la place actuelle de la question environnementale en agriculture.

### **TRUSTNET-IN-ACTION : un projet européen de recherche coopérative sur la gouvernance des activités et situations à risques (2003-2006)**

*Danièle BOURCIER, Gilles HERIARD DUBREUIL, Sylvain LAVELLE, Stéphane BAUDÉ*  
CNRS, CERS, Mutadis, ICAM  
France

Le projet européen de recherche coopérative TRUSTNET-IN-ACTION (TIA) a effectué durant trois ans (2003, 2006) le suivi de neuf processus de gouvernance inclusive d'activités ou de situations porteuses de risques pour l'homme et pour l'environnement (industrie chimique, pêche, zonage industriel, gestion de sites urbains pollués, extension aéroportuaire, gestion des risques professionnels, développement rural sous contrainte de protection de ressources naturelles, suivi de santé environnementale). Ces processus ont été mis en œuvre dans des contextes où les formes traditionnelles de décision et de régulation étaient inopérantes.

L'objectif de ce projet de recherche coopérative était d'investiguer les conditions et les moyens d'une évolution durable vers des formes de gouvernance inclusive de ces activités dans l'Union Européenne. La notion de gouvernance mobilisée ici n'est pas un substitut au gouvernement de l'Etat-nation traditionnel.

Comme le dit Rosenau, «la gouvernance est plus un phénomène englobant et diffus qu'une forme de gouvernement. Elle comprend les institutions gouvernementales, mais englobe aussi des mécanismes

informels, non gouvernementaux, par lesquels ces personnes et organisations peuvent, dans leur domaine, avancer, satisfaire leurs besoins et combler leurs manques dans leurs champs respectifs". La notion d'inclusivité rend compte de l'existence de chemins de changement vers des formes de gouvernance des activités jusqu'ici essentiellement coordonnées par des formes technocratiques de régulation. Ce chemin de changement est ouvert par des processus d'enquête coopérative qui se dégage aussi bien des processus analysés par TIA que de la méthodologie de ce projet.

La première partie présentera la méthodologie coopérative qui a été développée pour ce projet de recherche (TIA). Celle-ci a permis de construire sur trois ans un partenariat actif entre neuf groupes d'acteurs locaux et nationaux (engagés sur le terrain dans chacun des processus de gouvernance inclusive) et une équipe interdisciplinaire (sciences politiques, droit, économie, éthique, sociologie, gestion des risques, santé, environnement) de chercheurs de 17 institutions européennes. L'analyse a posteriori de cette méthodologie a conduit à identifier ses trois dimensions complémentaires (heuristique, stratégique et scientifique).

Construite partir du concept d'enquête sociale ("social enquiry") de John Dewey, cette méthodologie de co-expertise associe acteurs locaux, nationaux et chercheurs sur un double objectif. Elle visait d'une part à produire des connaissances fiables et actionnables pour les différents acteurs engagés et les chercheurs dans la perspective d'un changement vers une gouvernance inclusive dans l'Union Européenne. Elle visait d'autre part à créer les conditions d'une montée en puissance des participants de la société civile comme acteurs permanents de ce changement.

La seconde partie présentera les conclusions du projet sur les conditions et les moyens d'un changement durable vers des formes de gouvernance participative au sein de l'Union Européenne. Ces résultats montrent les limites et les ambiguïtés du développement de processus participatifs qui sont déconnectés des processus réels de décision. Ils mettent en évidence la nécessité d'une profonde transformation des cadres légaux et institutionnels afin de créer les conditions d'une implication durable de la société civile dans les processus de décisions. Les formes coopératives de production de connaissance et d'expertise sont au cœur de ces transformations. Ces résultats révèlent également l'apparition de stratégies nouvelles des acteurs locaux dans le cadre d'entités fondées sur la territorialité pour participer dans les processus de décision nationaux et internationaux qui impactent leur vie quotidienne. Le principal chemin de changement identifié vers des formes inclusives de gouvernance réside dans la mise en œuvre de processus fondés sur des méthodologies de d'enquête coopérative qui placent les acteurs de la société civile au cœur du processus d'investigation et de production de connaissance et non pas à la marge d'un processus technico-scientifique.

En conclusion, seront présentés les principaux éléments d'une nouvelle philosophie de gouvernance qui se dégagent de l'analyse transversale de ces neuf processus européens. Celle-ci s'appuie sur un concept de démocratie expérimentale et d'humanité concrète qui considère des individus multidimensionnels à la recherche d'équilibres de vie et enracinés dans des communautés fondées sur la territorialité.

### **Bridging the gap between university and civil society organisations: an ongoing process. A Canary Islands' case study**

*Juan SANCHEZ GARCIA, Maria Elena SANCHEZ JORDAN*

La Laguna University, Tenerife  
Spain

The objective of the paper is to evidence, through a case study, the importance of the university as crossroads for participatory research. In this case, it is the result of the convergence of two requests made to the eco-social studies centre of the University of La Laguna in the Canary Islands (CEES), many of whose members are not only researchers, but also active in social movements. Firstly, the petition for community based research (CBR) from a civil society organisation (a Citizens' Forum for participation in the Special Protection Plan for the historical centre of La Orotava); and, secondly, the petition for training for a master course on town-planning legislation to be delivered in the same university and addressing technicians of both the public administration and the private sector.

The CEES acts as mediator, creating the necessary conditions for what is hoped to be a fruitful convergence in a community knowledge-building process. On the one hand, the CEES provided the methodology and a series of working tools for the master course – through a Participation Seminar in April 2006 – which allowed technicians of different backgrounds and professions, mostly involved in town-planning

design and management, to prepare a joint hierarchical list of proposals for improving community participation in town-planning, prompted by their awareness of its importance and of its insufficiency.

Similarly, the CEES receives a request for a CBR from the Citizens' Forum regarding an initiative in the town of La Orotava, Tenerife, stemming from a conflict prompted by the classic problem of lack of community participation in the town's future development: in this case, the measures to protect the Historical Centre. One of the results of the initiative is a book on participative process experiences, made available to the technicians responsible for the drafting the Special Protection Plan, to the political decision-makers and to citizens in general. Currently, the Forum is demanding university engagement in the design and implementation of a research agenda directed to, with and by the community, and prompted by the experiences mentioned in the book.

A year after the Participation Seminar, CEES is invited to a second Seminar, this time on Historical-Artistic Heritage. This Seminar signifies an opportunity for encounter between stakeholders – Citizens' Forum and ad hoc 'Forum' of technicians – as they seldom coincide in training processes regarding community participation. They only meet in town-planning administrative participation processes, which both parties (Forum and technicians) have separately described as insufficient. Hence, a community knowledge-building workshop is scheduled entitled "Participative Model Experience to draft a Special Protection Plan" involving both stakeholders and mediated by CEES. It will take place during mid May 2007. The methodology of the workshop will consist in initially asking the technicians to reconcile the participation improvement actions that they had suggested a year earlier with the bottom-up participative process of the Citizens' Forum described by several of its members. The technicians will be asked to participate in the critical assessment of the bottom-up approach and to make suggestions for its amelioration based on the joint proposals of the previous year. The aim is to detect the common denominators between the proposals made in the Participation Seminar and the reality narrated by members of the Citizens' Forum, in order to improve decision-making processes.

## **Recherche et innovation : profil du chercheur, participation de l'utilisateur et conduite de projet. Etude de cas.**

*Stéphanie PETERS*  
Université de Liège  
Belgique

La recherche et surtout l'innovation sont des piliers de l'objectif fixé par l'Europe de « devenir l'économie de la connaissance la plus compétitive et la plus dynamique du monde ». Or, une innovation implique deux conditions : la nouveauté et l'usage (Gee, 1981). Une nouveauté ne se présente donc pas a priori comme une « innovation », mais comme une construction a posteriori d'un produit dans son contexte d'élaboration, d'utilisation puis d'exploitation par des utilisateurs (Charlier, Bonamy & Saunders, 2003). Ceci étant posé, nous souhaitons aborder 3 questions au travers d'une étude de cas :

- 1) quel profil le chercheur actuel doit-il développer ? ;
- 2) comment et sous quel statut l'utilisateur est-il associé à l'innovation ? ;
- 3) est-il possible de définir un processus type pour le développement de produits innovants ?

L'exposé que nous proposons porte sur le récit et l'analyse du processus de validation et de diffusion d'un outil de diagnostic du stress par l'Université de Liège. La volonté d'innover était présente tant lors de la phase de validation (répondre à une demande sociale dans le domaine de la prévention du stress au travail et se démarquer en proposant une méthode originale ) que lors de la phase de diffusion (développer une stratégie tournée vers les utilisateurs en proposant un service original recourant aux TIC ).

Pour analyser ce processus, nous avons pu développer une méthodologie de type anthropologique (empirique et inductive) : le recueil des données est basé sur l'observation participante (Laplantine, 1987) ; l'interprétation et la mise en forme des données a été possible grâce au recours à des concepts et/ou grilles d'analyses issus de la littérature (cf. infra).

Trois résultats principaux se dégagent :

1/ Le chercheur se retrouve aujourd'hui plus que jamais au carrefour de plusieurs réseaux d'acteurs, au sens où l'entendent Akrich, Callon et Latour (1988) : la communauté scientifique, les utilisateurs, les bailleurs de fonds. Il doit donc développer un véritable profil de traducteur (traduire son projet dans différents registres).

2/ L'utilisateur est essentiellement présent par le biais de représentations (Akrich, 1993) à deux moments du processus : la mise en forme des besoins et l'évaluation (validité, utilisabilité, utilité). La participation active

de l'utilisateur à la production de l'innovation (Darses de Montmollin, 2004) reste donc limitée.

3/ Une revue de la littérature nous a permis de distinguer trois phases caractéristiques d'un processus innovant (Flichy, 2003 ; Depover et Strebelle, 1997 ; Charlier, Bonamy & Saunders, 2003 ; Alter, 2000) : prise de risque, légitimation et stabilisation. Le passage de l'une à l'autre est un moment critique qui nécessite l'enrôlement de réseau socio-technico-économiques (Akrich, Callon et Latour, 1988). C'est dans cet enchaînement de phases que se joue l'innovation. Le résultat ne peut donc être garanti a priori ; tout au plus est-il possible d'adopter une conduite de projet propice à l'innovation.

### **La collaboration des experts et les mobilisations citoyennes comme facteur d'innovation sociale**

*Joaquim SEMPERE*

*Université de Barcelone*

*ESPAGNE*

En s'alliant avec des chercheurs et des experts, certains mouvements sociaux de défense de l'environnement ont prouvé non seulement que leur capacité pour devenir des interlocuteurs valables des Administrations Publiques est rehaussée, mais aussi que, dans un pays comme l'Espagne des 20 dernières années, ils arrivent à devancer l'État et les pouvoirs publics comme agents d'innovation sociale. Plusieurs études illustrent ce point. Le cas le plus frappant a été la capacité des mobilisations populaires au delta de l'Ebre pour stopper en 2004-2005 le transvasement d'eau de ce fleuve qui était prévu dans le Plan Hydrologique National, grâce à la qualité technique du dossier présenté à Bruxelles par la Plateforme populaire. Ces expériences montrent aussi les interactions entre experts et populations mobilisées, où tous apprennent au cours des actions menées ensemble. L'apprentissage des militants et des citoyens mobilisés apporte aussi un progrès dans la participation citoyenne à la vie sociale et politique et contribue à renforcer la conscience démocratique et la participation de la citoyenneté.

## 2.e Knowledge, people and biodiversity

*Savoirs, citoyens et biodiversité*

Room / Salle : L108/L118

Chairpersons / Présidentes de session : **Ana Delgado**, Autonomous University of Barcelona  
**Elise Demeulenaere**, Fondation Sciences Citoyennes

### Experts, Citizens and the Value of Biodiversity

*Ana DELGADO*

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 SPAIN

This workshop addresses the inclusion of multiple languages of valuation on environmental goods and services by means of debating previously identified topics relevant to a democratic knowledge production and management of biodiversity conservation.

Monetary valuation, informed by expertise on both neoclassical economics and molecular biology, has dominated policy-making processes on biodiversity issues. This approach has systematically excluded local community know-how and imaginaries. Citizens are usually included at the implementation phase but kept aside from the stages in which methodological options are taken on-board. Regarding biodiversity issues, this approach had little effect in stopping biodiversity loss and has created social and knowledge uncertainties.

In this workshop we will start with a brief description of the current status of biological diversity associated with agro-ecosystems in the European context. Later on, we will show our view on the importance of including multiple valuation languages by means of debating a particular case study on an agri-biodiversity conflict in which European rural movements belonging to Via Campesina, farmers and NGO's are involved. This will create a common ground for the further debate based on general topics regarding deliberative democracy and more specific topics related to biodiversity service markets and multiple languages of valuation.

For the debate we suggest the following questions: (i) Is it desirable to include everyone hence create an extended peer community of researchers-citizens and citizens researchers? Who may count as an expert?/Which criteria may be use to decide who will count as an expert?; (ii) When sustainability is not the preferred outcome of the democratic decision making process, then what should it be done?; (iii) How to create the appropriate conditions to enabling multiple valuation language dialogues?; (iv) Whose interests are represented within each valuation language?; (v) What are the assumptions behind each valuation language?; (vi) How may our approach (multiple valuation languages) affect the public perception on biodiversity service benefits?/What are the ethical and political implications of incorporating multiple valuation languages in the decision making process?. It is worth noting that these questions offer a frame for debate and are subject to change during the workshop according to participants' interests. By means of this workshop, we aim to enlighten current debate on biodiversity service values by broaden the scope from monetary and science based valuation methods to including participatory techniques which bring local expertise into account.

### Sciences participatives et expertise citoyenne : l'exemple de la recherche sur la biodiversité

*Sylvain ALLOMBERT, Anne DELESTRADE, Jean-Laurent HENTZ, Daniel MATHIEU*

Terra Biodiversita, Centre de Recherche sur les Ecosystèmes d'Altitude, Observatoire Naturaliste des Ecosystèmes Méditerranéens, Tela Botanica  
 France

Devant la crise d'érosion de la biodiversité, et devant la prise de conscience de l'importance de celle-ci pour le fonctionnement des écosystèmes ainsi que pour le développement durable des sociétés humaines, la recherche sur la biodiversité est à l'heure actuelle considérée par beaucoup comme une priorité fondamentale. Mais de part la nature même de la biodiversité (diversité des milieux, des espèces, des interactions, des processus au sein des écosystèmes ...), son étude, son suivi et sa compréhension demandent des quantités de données et de connaissances considérables, quantités souvent inaccessibles aux laboratoires de recherche.

Il est ainsi de plus en plus fait appel à l'expertise citoyenne et à des projets de recherche participatifs

impliquant le grand public afin d'obtenir les données nécessaires. Pour la mise en œuvre de ses projets, de nouvelles collaborations voient le jour au travers de partenariats entre organismes de recherche publiques et association, ces dernières permettant de réaliser le lien nécessaire avec le grand public. Par ailleurs, ces projets sont également utilisés par les associations comme d'excellentes occasions de sensibilisation des citoyens aux problématiques environnementales, sensibilisation d'autant plus efficace que le public est associé au projet et s'en approprie donc plus facilement les résultats.

Après une présentation détaillée des potentialités et de l'intérêt de la recherche participative dans l'étude et le suivi de la biodiversité, nous dresserons un panorama de la diversité des programmes participatifs existants en France en prenant exemple sur quelques projets particulièrement innovants et qui permettent de bien mettre en évidence toute l'efficacité de tels programmes. Nous présenterons ainsi des projets aussi différents par leurs méthodes et leurs objectifs que des études sur la phénologie des plantes en relation avec les changements climatiques (programmes Phénoclim & Observatoire Des Saisons), des enquêtes de terrain sur la répartition de certaines espèces patrimoniales (enquêtes de l'ONEM), une étude basée sur la bibliographie pour établir la répartition départementale de l'ensemble de plantes de France (programme de Tela Botanica) ou encore le développement d'indicateurs de biodiversité par le suivi d'espèces communes (programme Vigie-Nature du Muséum de Paris). Ces exemples nous permettront par ailleurs de présenter certains outils participatifs innovants développés ces dernières années sur Internet pour faciliter la mise en place de tels programmes. Nous terminerons enfin par la présentation d'un projet partenarial développé par 4 associations afin de favoriser le développement des sciences participatives et citoyennes sur la biodiversité en France.

Présentation des associations co-signataires :

*Terra Biodiversita est une association dont l'objectif est de favoriser la vulgarisation et la diffusion des connaissances scientifiques et naturalistes sur la biodiversité, l'écologie scientifique et les sciences de l'environnement. Par cette approche, elle cherche à sensibiliser le public aux problématiques environnementales et à promouvoir la prise en compte de ces dernières tant dans les actions quotidiennes des citoyens que dans l'établissement des politiques publiques. Elle est à l'origine du projet de développement des sciences participatives et citoyennes sur la biodiversité porté par les 4 association co-signataires de cette communication.*

*Le Centre de Recherches sur les Ecosystèmes d'Altitude (CREA) est une association à but non lucratif dont les objectifs sont de développer la recherche scientifique sur les milieux d'altitude et de sensibiliser le grand public au travers d'activités à caractère scientifique. Il est à l'origine de l'un des programmes de sciences citoyennes les plus importants en France, le programme Phénoclim sur l'étude des changements climatiques via la phénologie des plantes dans les Alpes (voir [www.crea.hautsavoie.net/phenoclim](http://www.crea.hautsavoie.net/phenoclim)).*

*L'Observatoire Naturaliste des Ecosystèmes Méditerranéens (ONEM) est le réseau des naturalistes de la région méditerranéenne oeuvrant pour une meilleure connaissance de la nature méditerranéenne. L'ONEM a entre autre développé des programmes de sciences participatives particulièrement innovants au travers de ses enquêtes naturalistes basées sur des cartographies interactives sur Internet (voir par exemple l'enquête sur la Magicienne dentelée sur <http://saga.onem-france.org/>).*

*Le réseau Tela Botanica a pour vocation de contribuer au rapprochement de tous les botanistes de langue française au travers de ces multiples disciplines et regroupe près de 6 500 botanistes répartis dans 75 pays. Tela Botanica est à l'origine d'un grand nombre de projets participatifs basés sur sa plate-forme Internet interactive, dont notamment un projet de répartition départementale de l'ensemble des plantes de France (<http://www.tela-botanica.org/papyrus.php?menu=49>). Tela Botanica est par ailleurs en pointe dans le domaine du développement de sites Internet participatifs et d'outils pour le travail en réseau.*

### **Sciences participatives et expertise citoyenne : l'exemple de la recherche sur la La co-construction de l'information sur la « nature commune »: l'exemple du programme Vigie-Nature.**

*Co-construction of data on the commons: the Vigie-Nature example.*

*Harold LEVREL, Romain JULLIARD, Christian KERBIRIOU,*

*CNRS, Université de Paris 1, UMR 51-73, Muséum National d'Histoire Naturelle, UMR 51-73, Muséum National d'Histoire Naturelle  
France*

Un des objectifs de la science citoyenne est d'articuler ensemble des critères d'efficacité et de justice dans le domaine de la production d'information.

Dans le domaine du suivi de la biodiversité, le critère d'efficacité renvoie à la production d'informations standardisées à un faible coût. Cette question du coût est essentielle dans un contexte où les

capacités institutionnelles de production d'information sur l'état de santé de la nature sont extrêmement faibles comparées aux moyens dont on dispose pour renseigner l'état de santé socio-économique d'un pays. Ainsi, l'Institut Français de l'Environnement (IFEN), le bras statistique du Ministère de l'Ecologie et du Développement Durable, dispose d'un budget extrêmement insuffisant pour mettre en place des systèmes de suivi statistiques comme le fait l'INSEE. C'est pourquoi les informations à large échelle sur la biodiversité sont le plus souvent issues de réseaux de bénévoles. Ces réseaux de suivi ont ainsi pour particularité de ne pas être fondés sur une forte division sociale du travail « expert » (comme c'est le cas à l'INSEE notamment) mais sur une logique de coopération entre différentes formes de savoirs – scientifiques, naturalistes, profanes. C'est à ce niveau que le critère de justice apparaît comme essentiel. En effet, une telle organisation crée des opportunités de controverses entre différentes communautés de pratique et permet d'offrir un meilleur accès ainsi qu'une plus grande transparence aux systèmes d'information sur la biodiversité.

En France, c'est le programme Vigie-Nature du Muséum National d'Histoire Naturelle qui en est le principal représentant. Ce programme s'est inspiré du Suivi Temporel des Oiseaux Communs (STOC) qui a débuté dans les années quatre-vingt-dix. Il s'appuie sur les savoirs naturalistes mais aussi sur les observations du grand public. Il s'intéresse à ce que l'on peut appeler la « nature commune ». Aujourd'hui, il regroupe, en plus du STOC, un programme de suivi sur les chauves souris, un programme de suivi sur les papillons de jour (STERF), un observatoire des papillons des jardins, un programme sur le suivi des plantes communes. Les bénévoles mobilisés et les méthodes adoptées sont variables et répondent le plus souvent à des contraintes de pragmatisme. Une approche comparative de ces différents programmes permet cependant de souligner un certain nombre de paramètres communs qui expliquent en grande part le succès de ces initiatives. Nous souhaitons en particulier insister sur :

- l'importance des règles de co-production des données (en particulier les fondements éthiques sous-jacents et le protocole de co-construction des données) ;
- le rôle central du profil des animateurs qui organisent le travail de co-production des données et font circuler l'information scientifiquement valorisée (en particulier, les capacité à utiliser différents « langages ») ;
- la fonction d' « objet frontière » que remplissent les indicateurs et permet de valoriser les informations co-produites, de comparer les résultats, de fournir un langage commun pour faciliter les débats autour de la question de la biodiversité ;
- la manière dont ces différents éléments s'articulent pour créer un système de réciprocité de services qui se nourrit de la confiance dans le système et de l'intérêt auprès d'un large public ;
- les vertus didactiques de la co-construction des données sur la biodiversité.

### **L'Observatoire des Papillons des Jardins : un indicateur de biodiversité construit par des milliers de citoyens**

*Benoît FONTAINE, Romain JULLIARD*

*Muséum national d'Histoire naturelle*

*France*

Lancé en 2006 à l'initiative du Muséum national d'Histoire naturelle et de l'association Noé Conservation, l'Observatoire des Papillons des Jardins est une opération de science participative à grande échelle, invitant les citoyens à identifier et dénombrer les papillons dans les jardins. L'objectif scientifique de cet observatoire est double :

1. fournir un suivi à long terme des populations de papillons communs, et donc un indicateur de biodiversité venant compléter l'indicateur STOC basé sur les oiseaux,
2. étudier l'influence du paysage, du type de jardins et des pratiques de jardinage sur l'abondance et la diversité des papillons.

La première année de fonctionnement de l'Observatoire a été un succès, puisque plus de 4000 jardins ont été suivis sur l'ensemble de la France, générant environ 400 000 données d'abondance pour les 28 espèces suivies : une telle quantité de données aurait été impossible à obtenir par des moyens classiques, en faisant appel aux seuls spécialistes. Ces données ont permis de constituer « l'état de référence » à partir duquel les tendances d'expansion ou de régression des différentes espèces seront établies au cours des prochaines années. Les analyses montrent que le type d'environnement (urbain, péri-urbain ou rural) et la composition des jardins ont une influence sur la richesse en papillons, avec des disparités régionales. Les pratiques de jardinage (préservation de zones de friches, utilisation de pesticides)

jouent également sur la diversité observée.

A la lumière des premiers résultats, le protocole a été légèrement modifié pour la deuxième année d'observation (modification de la liste des espèces suivies), et l'année 2007 a commencé avec un réseau accru de près de 40% par rapport à 2006. La communication des résultats aux observateurs devrait permettre d'atteindre le troisième objectif de l'Observatoire, qui bien que non scientifique, n'en est pas moins extrêmement important. En effet, il s'agit de faire des participants à l'Observatoire non de simples observateurs, mais également des acteurs de la préservation de la nature, en leur faisant prendre conscience de l'influence de leurs pratiques sur la biodiversité qui les entoure et en les amenant à se l'approprier. Permettre à chacun d'observer la nature dans un but scientifique, de transmettre des données qui seront analysées de façon scientifique, c'est aussi rendre les citoyens acteurs de la préservation de la biodiversité.

**2.f Democratizing knowledge – Lessons from Canadian experiences in Community University Research**  
 Démocratiser le savoir – Enseignements à partir des expériences canadiennes

**Room / Salle : L109**

Chairpersons / Présidents de session : **Budd Hall** and **Jessica Ball**, University of Victoria

**The Social Science and Humanities Research Council in Canada and CURAs (Community-University Research Alliances) – panel presentation**

*Budd L. HALL, Peter LEVESQUE, Maureen DUNCAN, Gisèle YASMEEN*

Office of Community-Based Research, University of Victoria, Knowledge Mobilisation Project, United Way of Greater Victoria, Social Sciences and Humanities Research Council of Canada  
 Canada

The Community University Research Alliance has become a well known model for research funding. When the Social Sciences and Humanities Research Council created this manner of funding, it brought to light a long history of diverse and varied approaches to community-university research partnerships. This workshop will highlight both historical and contemporary contributions to the international theory and practise of community-based research.

**All Intertwined and Diamond: Community-University Partnerships for Indigenous Research and Education in Canada**

*Jessica BALL*

School of Child and Youth Care, University of Victoria  
 Canada

Partnership has become a buzzword in Canadian university research and community development. How do we journey from where we are situated, historically, culturally, politically, and in terms of reward structures, to be open to what a community partner might want or need? How do we set up a partnership? What is the nature of expertise that university partners and community partners bring to applied social science research? How do we know when we have achieved an authentic partnership? Once we've achieved an authentic civic engagement in a program of research, where does it end?

In this workshop, Jessica Ball will map this exciting and challenging terrain with reference to community-university partnerships in Canada to support new knowledge and the elaboration of culturally congruent approaches to social services that promote Indigenous child and family well-being. First, a successful post-secondary diploma program delivered in First Nations communities and involving tribal Elders co-constructing the curriculum will be described. Called the First Nations Partnerships Program ([www.fnpp.org](http://www.fnpp.org)), this successful innovation has been recognized by UNESCO as one of the world's 'best practices' in incorporating Indigenous Knowledge into professional training. Guidelines for this kind of civic engagement in which universities are also learning new ways of engaging with communities and generating knowledge will be described. Participants will consider how these guidelines might apply to their own institutions and capacity building efforts.

The workshop will also describe experiences in a program of community-university partnership research focused on Indigenous children and family development in Canada. Called the Early Childhood Development Intercultural Partnerships Program ([www.ecdip.org](http://www.ecdip.org)) this research has been internationally recognized for completing the first studies in Canada of First Nations English dialects and First Nations fatherhood. Dr. Ball will highlight some lessons learned about forging mutually beneficial partnerships for advancing solutions to the social problems facing Indigenous peoples, while extending the scope of development theories and practice models to encompass the knowledge, needs and goals of Indigenous children and families. The workshop will address the challenges of navigating pathways for productive research while adapting to multiple, rapidly evolving frameworks for ethical research practices involving Indigenous knowledge and participation. This workshop will cast Indigenous peoples' engagement in social science research with university partners within agendas for social justice and equity.

**La recherche partenariale le modèle de l'ARUC-ÉS et du RQRP-ÉS***Partnership in research the model of l'ARUC-ÉS and RQRP-ÉS**Sonia VAILLANCOURT, Lucie DUMAIS, Denis BUSSIERES, Geneviève SHIELDS**Presentation by : Denis BUSSIERES*

Conseil québécois du loisir, Université du Québec à Montréal, Réseau québécois de recherche partenariale en économie sociale, Alliance de recherche universités-communautés en économie Canada

L'Alliance de recherche universités-communautés en économie sociale (ARUC-ÉS) et le Réseau québécois de recherche partenariale en économie sociale (RQRP-ÉS) sont deux espaces de partenariat pour le développement de la recherche en économie sociale. L'ARUC-ÉS a été créée en 2001 et le RQRP-ÉS en 2005.

L'ARUC-ÉS et le RQRP-ÉS ont comme objectifs

- D'animer la recherche en économie sociale et produire des savoirs qui seront utiles au développement des collectivités en coordonnant des réseaux de chercheurs et de partenaires du milieu;
- De favoriser et soutenir la formation en économie sociale en organisant des ateliers et en intégrant des étudiants dans leurs activités;
- De diffuser des résultats de recherche en éditant diverses publications et en organisant des séminaires, des conférences et des colloques réunissant chercheurs et praticiens;
- De promouvoir la co-construction des connaissances entre les universités et les communautés et l'utilisation des résultats de recherche dans le milieu de l'économie sociale.

Si l'ARUC-ÉS et le RQRP-ÉS partagent les mêmes objets d'étude et une même approche de recherche, ces centres se distinguent toutefois l'un de l'autre en raison des champs d'action de leurs équipes de travail respectives : les équipes de l'ARUC-ÉS ciblent différentes thématiques sectorielles liées à l'économie sociale, alors que celles du RQRP-ÉS travaillent sur une base territoriale.

L'organisation même de l'ARUC-ÉS et du RQRP-ÉS témoigne de cette volonté de rapprocher les milieux de la recherche et de l'action. Les deux centres sont codirigés par Jean-Marc Fontan, professeur chercheur à l'UQÀM et Nancy Neamtan, directrice du Chantier de l'économie sociale. Les équipes de travail sont sous la responsabilité d'un représentant du milieu universitaire et d'un représentant du milieu de l'économie sociale.

Nous aimerions présenter le modèle de recherche partenariale que nous avons développé depuis la mise en place de nos structures de recherche. Ce modèle touche la définition de l'objet de recherche, le processus de réalisation ainsi que la valorisation des connaissances.

L'expérience des processus de coconstruction de la recherche et ce dans un contexte interdisciplinaire a permis à l'ARUC-ÉS et au RQRP-ÉS de synthétiser diverses conditions nécessaires au bon déroulement d'une recherche partenariale et à sa valorisation au sein des milieux concernés.

Nous explorerons quelques éléments liés à la gouvernance des espaces de recherche, aux principes et méthodes de travail ainsi que diverses questions liées au déroulement d'une recherche menée en partenariat.

**Research Works! for child literacy: A Canadian Community-University Research Alliance (CURA)***Beatrice MOOS, Kathleen BLOOM*

University of Waterloo  
Canada

Research Works! for child literacy (RW!) is a Canadian community-university research alliance (CURA) dedicated to improving child literacy. In this presentation we will describe how RW! connects research to practice through 4 collaborative activities: creating systematic reviews of research evidence, creating systematic catalogues of programs and research reviews, conducting open-classroom courses, and conducting applied research studies. RW! projects are driven by community interests and needs and result from a dynamic collaboration between community and university partners. Decisions about relevance, priorities, resources, and scope are shared through discussion, collaboration, and consensus.

We will show how the unique skills of both practitioners and academics and the mutual respect for

different ways of thinking have allowed RW! to increase its partnerships and create interrelated partnerships and associations while maintaining the principle of active and useful research.

Students are the vehicles and glue to the RW! alliance. Students provide energy, cohesion, diverse knowledge and ideas, and act as translators between academics and community partners. We will illustrate how community partners from preschools, literacy service groups, government, educational television, speech therapy, and so forth actively participate in undergraduate and graduate training in the classroom, laboratory on site, and through e-Communities; and how students learn about research methods and develop high-quality research proposals using the wisdom of community expertise and the academic advice of university professors. We will argue that by creating useful research products (e.g., systematic review of the efficacy of tutoring; catalogue of paediatric reviews of evidence; studies of the impact of reading with children at home and in hospital clinics) and making the results freely available on our website, RW! has engendered a hunger and excitement for research discovery.

There is no one-size fits all strategy for successful community-university partnerships. We will provide one example of a Canadian community-university research alliance that has shown benefits to both researchers and practitioners by working together to bring child literacy research to policy, practice, and the public.

### **A Partnership Model Emerges from A University-Community Partnership**

*Dianne McCORMACK, Bawn Marie BUCK*

*University of New Brunswick  
Canada*

Multiple partnerships exist between the University of New Brunswick (UNB) Campus at Saint John and the Atlantic Health Science Corporation (AHSC), the regional health authority in Saint John, New Brunswick, Canada. This paper will discuss a partnership model that evolved when practitioners at a Community Health Centre within the AHSC collaborated with faculty at UNB in Saint John. A philosophical match, geographic location, timing, and need facilitated the development of this model of engagement.

At this Community Health Centre, care is provided from within a context of community development with a focus on primary health care, the determinants of health, and capacity building. This, however, may not be the approach to care used at other facilities within the AHSC. At the Department of Nursing at UNB, the philosophical underpinnings of the curriculum that direct how nursing is practiced include primary health care, social justice, and caring with a focus on determinants of health, caring relationships, and evidenced based practice. As expected, this philosophical approach is not maintained by other academic units at UNB. Interested faculty at UNB and employees from the Community Health Centre were both seeking confirmation of their belief systems and searching for partners to test out this philosophical approach to care. Each group is a small entity within a larger institution. Strategically located within five kilometers of each other, opportunities for dialogue between members of both groups emerged. Concurrently, the university administration was interested in developing a health research agenda. At the Community Health Centre maintaining funding for programs was a constant concern.

Funding sources demand evaluation beyond the anecdotal evidence of providers. University faculty could facilitate and apply systematic rigor to the evaluation data that existed and further identify evaluation data that needed to be collected. Practitioners at the Community Health Centre could easily identify concerns inherent in practice. These practitioners knew the problems of practice and could identify relevant research questions. Health researchers are interested in these questions.

Diverse needs brought people together in multiple small projects. The snowball effect became evident, common interest brought people together through various meetings, projects, and student placements. As people got to know people, the connections between the two institutions grew, expectations of the partnership unfolded, strengths and assets were realized, and a model of partnership emerged. Through dialogue, the foundation or principles of the partnership were discerned. This insight led to further analysis of the partnership. Partners recognized that continued maintenance of the partnership or its termination was dependent on the acceptance of foundational partnership principles. Even though the common philosophy of primary health care is one aspect of the glue that nurtures the relationship, the tensions that exist fuel the continued growth and development of the partnership. Tensions, within this partnership, are accepted as opportunities that result in beliefs being challenged, new questions being asked, and new lessons learned. The opposite position of no tension is not supported in the partnership as

that position will result in comfort with the status quo and the eventual termination of the partnership. This paper proposes to describe further the foundational principles of an evolving university-community partnership and to present the intricacies of this partnership model.

### **Community Engagement as a Methodological Practice**

*Uzo ANUCHA, S. NOMBUSO DLAMINI*

*Presentation by : Uzo ANUCHA*

*York University, University of Windsor  
Canada*

This presentation discusses a framework for community-university research – The Community Dialogue Approach – that re-imagines research as a community dialogue that must fully engage the community studied. The Community Dialogue Approach (CDA) has two main features. First, it is centred on extensive collaborations with community stakeholders during all phases of the research process. Second, it allows for the inclusion of multiple voices by emphasizing the use of multi-methods to inform an understanding of the issue under study. The CDA is made up of a five-stage research process that starts very broadly to gather data that is used to progressively narrow the focus of the research.

The first stage: “Engaging the Community” begins the process of creatively and fully engaging diverse community stakeholders. The second stage: “Building the Knowledge Capacity” involves a systematic review of the literature and secondary data analysis of existing data. The third stage: “Identifying Community Assets” involves developing profiles of the communities the research focuses on. This stage is critical in identifying resources and gaps within these communities. The fourth stage “Conducting Multi-focal Research” involves multi-method primary research. The fifth stage “Integration of Findings” involves integrating findings from the multi-methods and noting where they converge and confirm each other or where they contradict which can potentially generate new insights. The integrated findings also identify leverage points for possible policy and practice interventions. The sixth stage: “Knowledge Translation and Dissemination” focuses on disseminating findings to both academic and non-academic communities. The presentation will discuss how the CDA was used in a study that focused on understanding the relevance of social capital to immigrant women. It will describe the lessons learned from the various strategies that were used for community engagement. Challenges and possibilities of the CDA approach with particular reference to applied research that informs policy and practice will be discussed.

**Saturday, 1<sup>st</sup> of September – Samedi, 1 Septembre 2007****General planning – Organisation générale de la journée**

Time / Horaires	Place / Endroit	Activity / Activité
9.00 – 11.00	rooms: V115, V106, V107, L213, L224, L109	Session 3: six parallel sessions 3a - 3f
11.00 – 11.30	Espace Vendôme	Coffee break/ pause café
11.30 – 13.30	Espace Vendôme and rooms	Open Space: participatory workshops, open discussions
13.30 – 14.45	Espace Vendôme and Terrasse	Lunch
before 15.00		Posters have to be removed
14.45 – 15.45	Amphithéâtre L108/L118	Plenary / session plénière
15.45 – 16.30	Amphithéâtre L108/L118	Conclusions and closing of the conference

**Saturday, the 1<sup>st</sup> of September – Samedi, 1er septembre**  
**Parallel Session 3**  
from 9.00 to 11.00 am

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**3.a University engagement with communities - evaluation**

Coopération entre institutions scientifiques et collectifs citoyens - évaluation

**Room / Salle : L224**

Chairperson / Président de session : Emma McKenna, Science Shop Queens University, Belfast, Northern Ireland

**Defining and measuring university-community engagement in Australia : the benefits and constraints of diversity***Madeleine BRABANT, Anne-Maree DOWD, Michael CUTHILL*The University of Queensland, UQ Boilerhouse Community Engagement Centre  
Australia

In recent years changes in funding towards Australian universities has resulted in an increase in the involvement of communities within the higher education sector. Therefore, higher education community engagement (HECE) has become a topic of interest for Australian tertiary institutions. This is evidenced through the recent formalisation of the Australian University Community Engagement Alliance (AUCEA) in 2005. There are now 32 Australian universities which have joined AUCEA as institutional members. However, there is a lack of agreement amongst institutions and in the literature on the definition and measurement of community engagement in higher education. This is demonstrated by the range of terminologies used both in academic and government literature to conceptualize engagement with community. This in turn results in a variety of indicators upon which investigators have yet to reach consensus.

The purpose of the paper is to produce a document which will contribute to the ongoing discussion amongst universities on a suitable definition and measurement of HECE. This paper will highlight the commonalities and differences between approaches found in the literature. It will also assist universities in reaching a level of agreement on what is HECE and how to measure it. A literature search reviewing definitions and indicators of community engagement from a variety of documents, such as Government policies, academic journals and books will be undertaken. A thematic content analysis, using Leximancer, will be used on the documents. Our hope is that this will serve as a starting point for policy development and strategic planning as well as recognition for academics through promotion criteria.

**Community reactions to Student Engagement***Elizabeth TRYON, Randy STOECKER*Edgewood College, University of Wisconsin  
U.S.A

What do community organization staff think of college and university attempts at community engagement? This presentation will focus on the reactions of 64 community organizations to service learning programs, and will present their recommendations for improving the practice of service learning. The audience will be invited to discuss ways to implement their recommendations.

**Research partnerships: Feminists researchers confronting the challenges***Rachel BERMAN*Ryerson University  
Canada

This paper demonstrates how participatory research is compatible with certain feminist principles, and hence holds great appeal to many feminist researchers. This paper will also explore how such an approach to research creates certain challenges, for example, what Himmelman (1996) succinctly identifies as the three "T's": "time, trust, and turf." Langan and Mortan (under review) also note financial constraints, differences in culture and education, and differences in research goals, while Harrison (2003) alerts us that issues can arise regarding how research results are communicated, and that partners

may have differing yardsticks of success.

Another key issue that feminist researchers doing participatory research highlight is the issue of power; Mandell and King (under review) assert that the “chief dilemma [in research partnerships]...is acknowledging and working with differences in power and social location.”

This paper will discuss these challenges, and others, and will highlight the importance of an on-going and dynamic approach to reflexivity during the process of participatory research from a variety of feminist perspectives.

### **A Survey of Community Based Research in Canada**

*Beth SAVAN, Sarah FLICKER, Brian KOLENDA, Matto MILDENBERGER*

University of Toronto, Ontario

Canada

Community Based Research (CBR) is increasingly being recognized as important in yielding concrete knowledge and understanding that can guide policies and programmes to reduce health and social disparities. There is a growing movement of Canadians engaged in CBR. We conducted a web based survey of community and university CBR practitioners to learn more about the context and efficacy of CBR in Canada. We learned that Canadian CBR practitioners are actively engaged in research across a broad range of health and social issues. Given relatively modest budgets, they are extremely productive. Community Based Researchers are producing new and important knowledge that is being recognized and disseminated in the published literature and through conference presentations. In addition, their efforts have contributed to lasting impacts through program and policy changes. Academics dominate most areas of the research process, service providers take a greater lead on dissemination and advocacy while community members were the “least involved” partners. Finding an appropriate balance between efficiency, capacity-building, and real resource constraints remains an ongoing challenge in the pursuit of CBR in Canada.

### **University-Community Partnerships to Foster Family Support**

*James R. COOK, Ryan P. KILMER, Sheila WALL HILL, Laura WEBER, Libby CABLE*

The University of North Carolina at Charlotte, ParentVOICE, The Lee Institute

U.S.A

Family advocacy and support organizations can be important sources of assistance for families in which a child has mental health problems. These organizations, typically staffed by parents whose children are receiving services, can help families negotiate complex service delivery systems, and provide needed support for families who otherwise feel isolated and disempowered. However, since family support initiatives are often not paid for through commonly available health insurance programs in the United States (public or private), sustainability of those initiatives is often dependent upon the ability of the organizations to document the impact of their services and supports on the families they serve.

In particular, funding sources are interested in evidence that the support services result in improvements in the functioning of the youth and families. At the same time, many of these grass roots organizations do not have the capacity to evaluate themselves in ways that can adequately demonstrate the value of their services.

University faculty and students can help these organizations develop the capacity for evaluation, lend legitimacy to evaluation efforts, and provide technical assistance that can help the organizations further develop a case for continued financial support and develop feedback loops that can improve their effectiveness.

This presentation describes a university-community partnership in which university faculty and students are collaborating with a family support organization in which most staff members are parents of children with mental health needs. Through this partnership, the family support organization is developing better means of collecting and recording data about the services they provide, and this information is being linked with data the university is gathering on how the youth with mental health challenges and their families are functioning. These data will then be used to identify changes in outcomes that are attributable to family support assistance and, ideally, foster sustainability by helping family support organizations document effectiveness to potential future funding sources.

### 3.b Who is afraid of citizens' involvement in Nanotechnologies ? Qui a peur de l'implication des citoyens dans les nanotechnologies ?

Room / Salle : V107

Chairperson / Président de session : **Henk Mulder**, Science Shop Gröningen

#### **Citizen Engagement in Nanotechnology**

*Maria POWELL, Mathilde COLIN*

Nanoscale Science and Engineering Center (NSEC) of the University of Wisconsin-Madison  
USA

The National Science Foundation funded Nanoscale Science and Engineering Center (NSEC) at the University of Wisconsin – Madison has developed several projects to engage lay citizens in dialogues with scientists about emerging nanotechnologies .

After the Madison Citizen Consensus Conference on Nanotechnology in 2005, NSEC researchers wanted to continue to connect citizens with scientists, and to empower them so they can have input in decision-making about nanotechnology research and development.

NSEC researchers, in collaboration with citizens who participated in the consensus conference, developed The Nano Cafés, a unique model that involves deeper and more ongoing citizen engagement than traditional engagement exercises (<http://www.nanocafes.org>). In this presentation, we will first discuss the differences between Nano Cafés and other engagement models. Then, we will present the major questions that we encountered during their implementation, including:

- (1)How can university scholars engage communities upstream on emerging technologies, when there are no organized communities working on nanotechnology issues?
- (2)What role does the university play in community engagement and capacity-building?
- (3)How can university researchers who are facilitating citizen engagement in nanotechnology promote critical and informed public engagement on one hand, while working for university departments that are directly involved in nanotechnology research and development?

#### **The Nanoscience Dialogue Project**

*Lourdes RUE*

CREA - University of Barcelona  
Spain

The Nanoscience Dialogue Project was oriented to opening up a public debate on nanoscience and nanotechnology at different levels of our society, by involving regular citizens who do not have specific scientific knowledge together with researchers in the field. This project was thus oriented to work on the development of new processes of dialogic science communication, in which both, scientists and researchers have a say and contribute their knowledge and questions. The final goal will be to improve research processes and agendas. The Nanoscience Dialogue Project was led by the research centre CREA, at the Barcelona Science Park. It included three phases:

- a) a survey about the public knowledge of nanotechnology;
- b) two working groups, with adolescents and with adult learners;
- c) a seminar called "Dialogue on nanoscience", with the participation of nanoscience researchers and lay citizens, some of whom had previously participated in the working groups.

The questionnaire provided evidence about people's lack of knowledge about this type of research and its application, but also their eagerness to know more, particularly providing the amount of public money spent on it. The working groups were highly motivating, in such a way that participants got self-informed: they were developed into two sessions, the first one to present the topic and key data and the second one to share further information found and dialogue about it. When these people participated in the Dialogue Seminar with researchers, they did not only listened, but formulated intelligent questions and comments.

Projects such as this one demonstrate that the public has real interest in science, disproving many stereotypes, and that there is a need for spaces that bring science and society closer together.

**Governance of nanotechnology – aspects of influence and legitimacy***Michael SOGAARD JORGENSEN*

The Science Shop, Department of Manufacturing Engineering and Management  
 Technical University of Denmark  
 Denmark

In various European countries research and dialogue activities aiming at involving citizens and civil society organisations (CSOs) in the governance of nanoscience and -technology have been conducted during the recent years, like Nanologues, NanoDialogue, NanoCap and the Nanotechnology Engagement Group (NEG). The activities can be seen as a mixture of upstream public engagement in the development of an emerging technology area and downstream engagement, where the engagement takes place after products have entered the market.

The experiences so far with governance of nanoscience and -technologies show a number of challenges that need to be handled:

- Nanotechnologies are enabling technologies that are claimed to be useful in almost all areas of the society and thereby in relation to many social needs
- Research and development of nanotechnologies is a highly competitive area, which together with an increased focus of universities on spin-off companies, patents etc. may make confidentiality a hindrance to public insight and scrutiny
- CSOs may be afraid of being used for legitimising nanotechnologies by engaging in dialogue activities if these are not aiming at opening the research processes and giving the CSOs insight and influence
- CSOs may be afraid that nanoscience and -technology favour technical fix solutions to the problems within for example environment and health, which they are working with
- Some nanoresearchers are afraid of public dialogue, while others are interested because they are afraid that the same type of criticism that is seen in relation to genetic modification should develop around nanotechnology
- Nanoresearchers may feel they have to promise fast societal benefits from the research and in order to attract public and private funding, whereby the researchers may contribute to the development of some kind of 'nano hype', which be followed by disappointment about the actual achievements.

A tension between openness and relevance needs to be addressed in the organisation and planning of public engagement in relation to a technology area. Openness is a question about what type of influence the CSO has on the planning of the engagement process and how much influence a CSO achieves through the engagement process. Relevance is a question about whether the scientists, the governmental agency etc. find it relevant to organise or participate in the engagement process (whether they for example hope to obtain CSO feedback to some ideas they have).

An engagement process may have different types of results:

- increasing knowledge of the CSO and/or the scientists (for example about technology, social impact, or policy strategies),
- developing new network relations (to CSOs, to researchers etc.)
- developing actions (like (re)framing a discourse, social mobilisation or getting influence on a research strategy).

The paper and the presentation discusses the role of civil society, including CSOs, and of community-based research in the different types of public engagement in relation to nanoscience and -technology and discusses what type of influence these activities seem to have had and could have in the future. Parallels are drawn to other technology areas.

**Dialogue-Based Engagement with Science***Christopher TOUMEY*

University of South Carolina  
 U.S.A

If nonexperts are to be engaged in discussions and decisions about science and technology policy in democratic societies, one cannot depend upon large-scale civic scientific literacy. Research and experience in several countries has shown that attempts at the one-way transfer of scientific knowledge from experts to large populations of nonexperts are misguided and unrealistic.

A different approach to the engagement of nonexperts is based on the idea of stakeholders: some people will self-identify as being interested and active in an issue of science or technology policy because they believe it will affect them. In those circumstances, nonexperts tend to learn, understand and deploy the necessary scientific knowledge when they feel they have to. The best way to serve self-identified stakeholders is to create dialogue-based programs in which the participants gain background knowledge, and also express their values and concerns to experts, and have opportunities to question the experts. Thus they gain confidence to have active and constructive roles in science and technology policy. The South Carolina Citizens' School of Nanotechnology (SCCSN) is an exercise in dialogue-based engagement; founded in 2004, it has now executed seven rounds.

In addition, a Spring 2007 experiment, the Citizens' School of Fuel Cell & Hydrogen Technology (SCFC&HT) explored whether the SCCSN model could serve another scientific topic besides nanotech. This presentation reports the SCCSN model and its ethos of dialogue; in addition, it offers insights from the companion program (the CSFC&HT) so that one can consider the problems and the strengths of this approach to public engagement.

## **Everyday Citizens and Historic Opportunities**

*Khan RAHI, Richard WORTHINGTON*

Loka Institute  
Canada

This presentation focuses on the challenges, and the lessons-learned, from Loka's efforts to create participatory space in science and technology. We will particularly focus on Loka's involvement in the 21st Century Nanotechnology Research and Development Act passed by the US Congress in 2003 that requires "public input and outreach to be integrated into the Program by the convening of regular and ongoing public discussions, through mechanisms such as citizens' panels, consensus conferences, and educational events."

How has the context for everyday citizens participation changed over time? What are the emergent challenges and the changing dynamics of public participation with more space now available and how is public participation, as a public policy issue, being approached by various players?

We intend to engage community-based researchers, nano science graduate students and practitioners to discuss enabling strategies for public participation and to develop collaborative networks to compare lessons-learned in nanotechnology as an industrial revolution across regions.

The Loka Institute since the early 1990s has promoted community-based research and has advocated making research, scientific and technological decisions made at government and corporate level responsive to democratically-decided social and environmental concerns. Loka has been effective in promoting the Science Shops model among the researchers and practitioners through the efforts of the Community-Based Research Network (CRN) which we created in the mid-1990s, and in engaging activists from this network in science policy issues.

### Background:

Loka through the work of a network of activists persuaded the US Congress to include public participation provisions in this Act. Loka President Professor Langdon Winner of the Rensselaer Polytechnic Institute testified on the need for meaningful public participation before the House Science Committee during the legislative process. Loka Board Chair Professor Rick Worthington wrote an analysis of the political economy of nanotech participation which he presented at the Living Knowledge 2 conference.

We also mobilized a broad-based group of community activists, academics, and university and philanthropic leaders to sign a letter to elected officials and science policy advisors encouraging specific participatory provisions in the pending nanotech legislation. Subsequently, after the legislation was signed into law, Loka organized a workshop at Howard University for community activists from around the country to make recommendations about how to implement the participation provision within newly established law. In 2007, we have submitted comments on a nano risk framework proposed by DuPont and Environmental Defense, and several Loka participants are active in a coalition of public interest, popular education and labor groups that are bringing participatory, environmental and social concerns into national policy discourse over nanotech. Furthermore, we have partnered with the Center for Responsible Nanotechnology and the Center for Community Action and Environmental Justice to implement one of the recommendations made by the community activists at the Howard University workshop to develop popular education modules on "nanotechnology as an industrial revolution".

We believe that the motivation of the science and technology elite in acknowledging and funding public participation in the U.S. and elsewhere is to prevent the core workings of capitalist innovation from being obstructed by a legitimacy crisis. How much can be accomplished within this political framework? In this presentation, we will argue that the space for autonomous action is sufficient for meaningful change to take place and, based on our experience, we will identify key strategies for making the best of what will surely be a transitory, but historic, opportunity.

### 3.c Examples of fruitful scientists' engagement with local communities *Exemples de partenariats fructueux entre chercheurs et collectifs locaux*

*Session organized by INES – Session organisée par l'INES*

**Room / Salle : L109**

Chairperson / Président de session : **Tom BORSEN HANSEN**, INES

#### **Collaboration of public universities with municipalities and local governments : The case of Marmara University of Istanbul**

*Tanay Sidki UYAR*

Marmara University

Turquie

Marmara University Faculty of Engineering is providing support to local municipalities in Turkey to increase the capacity of each municipality to provide up to date information to citizens on local energy planning, energy end-use efficiency and renewable energy technologies.

Turkey's existing huge technical potential of renewable energies are not utilised under the pressure of the national and international fossil and nuclear energy lobbies. As it is well known by the energy sector decision makers, the main direction in new energy investments are switching from fossil and nuclear power to energy generation in natural environment. Industrialised countries are trying to dislocate their inefficient and polluting technologies and their external costs to developing countries through export credits, arbitration and state guarantees. Municipalities in Turkey are approached by national and international companies to market their older technologies. Such investments are increasing the cost of Turkey's integration to Europe. Private Universities are not very much interested in the areas of research other than requested from their financing institutions or companies.

The main activities of the collaboration between Marmara University and Municipalities include capacity building through seminars, conferences and workshops with the participation of the different stakeholders of each town and city consulting on local energy planning, end-use efficiency and renewable energy integration and development of the implementation projects.

In Turkey, the social movement of environmental NGOs is organized under the umbrella of Regional Environmental NGO Platforms. Each regional platform has 5 representatives which come together to form Turkish Environmental NGOs Platform (TURCEP). Regional Platforms hold their meetings, each two months, in another city of the region and work on local, regional and national environmental problems with participation of all stakeholders including Public Workers, University Staff and Municipality representatives of each city.

While trying to define the environmental problems correctly and finding solutions that can be implemented, participants of the regional NGO Platforms noticed that the main factor encouraging inefficient and polluting technology investments is misinformation and the lack of a long term strategic decision making process. Common decision of the Turkish Environmental NGO Platform Representatives Parliament was to invite Public Universities to be more concerned about energy and environment related topics and carry out some more research on the topics of urgent needs.

Public Universities and their staff are financed by the citizens. Therefore it is their duty and responsibility to collaborate with the Local Governors. Involvement of a University is very important and support by another kind of knowledge producing entity (NGO, company, scientific association) may be helpful when they have a special service to provide.

### **The date palm midribs project : an example of the role of the university in the development of a local community**

*Hamed EL-MOUSLY*

INES

Egypt

The University in Egypt represents a live part of our society. The geographical distribution of our universities suggests some sort of division of responsibilities, whereby each University is responsible for the development of the region, where it is located. Thus, the University could develop a vision for its student as an active member of a certain local community within its region. This, in return, suggests a drastic change in the curricula and the degree of flexibility given to the student to choose his courses and projects, so as to develop avenues of interaction between the local communities and the University. In this way, the great variety in the ecological conditions and historical experiences within each region could be reflected as different profiles of these Universities.

The date palm is an essential element of the flora: in EGYPT, AFRICA and the whole ARAB region. It has been one of the pivots of the economic, social and cultural life from ancient times. Being a product of annual pruning, the palm midribs (PM) represented a cheap locally available resource for the poor in the village. PM found many uses in roofing of rural houses, the manufacture of crates for the transportation of the village produce, of furniture items, manual fans, etc. The emulation of the Western way of life in rural areas has led to the decay of the traditional uses of PM leading consequently to the neglect of pruning of palms and the emergence of the danger of fire in the palm gardens and the infestation by dangerous insects.

Within the framework of the B.Sc. projects, the students of the Design&Production Dept., the Faculty of Engineering, Ain Shams Univ., have been invited to develop machines to transform the PM into a regular shape with the purpose of opening a new avenue of economic utilization as a substitute for imported wood. The inspiration of the students came from being convinced that their engineering effort will change the relation between the villagers and their local materials leading to the endogenous development of the local communities. Since PM is really a local material this has led to real innovations! New models of machines have been thus designed and manufactured. These machines were an important component in the dissemination of micro- and small-scale industries in several villages in Egypt relying on PM as a local material. Thus, the University could contribute to the efforts of endogenous development of local communities via the students, who are in search for the meaning of their life and future carrier.

### **The experience of Open Ecological University (Moscow) in Bringing the Modern Environment Knowledge to the Local Communities**

*Inna A. AVEROCHKINA, Valery PETROSYAN*

INES, Open Ecological University of Moscow

Russia

Open Ecological University (OEU) program of free environmental education has been found in 1987 at M.V. Lomonosov Moscow State University (MSU) with the aim of bringing the up-to-date environmental knowledge to the general public, particularly in the local communities.

18 famous Russian scientists were invited for the first project to present lectures, which have been attended by more than 600 people. The Program got the wide resonance and has been presented also in the Russian science towns Obninsk and Zelenograd, as well as in the capital cities of Kazakhstan (Alma-Ata) and Latvia (Riga).

From 1990 to 1998 OEU was operating at MSU for various Moscow regional communities as the two years Program (160 hours). The first year the participants were getting the lecture course (80 hours), divided into eight parts: 1. General ecology; 2. Geoecology; 3. Environmental chemistry and toxicology; 4. Environmental risk assessment; 5. Ecological economics; 6. Environmental legislation; 7. Ecological expertise; 8. Sustainable development.

After the end of the lecture course the participants were passing examination and in the case of success they have been transferred for the second year of education. During that year they were getting 80 hours of seminars in the frame of the chosen specialization. As the final step each of the participants was writing the graduation project on one of the environmental problems and defending the project at the meeting of the graduation committee.

The successful graduates have got the Certificates, which, as the experience has shown, were helping general public to get the new interesting jobs and undergraduates to become the graduate students. During those years about 1800 people have got the additional education within the Program.

Starting from 2000 OEU performs special educational projects for various local communities:

2000 - "Chemistry and Environment" – Moscow ©, 420 people;  
 2001 - "EcoWorld" – Moscow (SW), 450 participants;  
 2002 - "Rio+10: problems of sustainable development in Russian Federation" - Moscow ©, 640 people;  
 2003 - "Environmental safety and sustainability" - St. Petersburg, 230 participants;  
 2004 - "Rio + Johannesburg: difficult road to sustainability" – Moscow ©, 380 teachers;  
 2005 (spring) - "Ecological stresses and children's health"- Moscow (S), 210 schoolchildren and their parents;  
 2005 (autumn) - "Ethics in teaching chemistry at school" – Moscow (SE), 175 chemistry teachers;  
 2006 - "Ecological safety and sustainable development of Russia" – Great Novgorod, 1260 people;  
 2007 - "The environment and children's health", Moscow (SW), 190 schoolchildren.

Several observations have been done within the functioning of the Program:

- 1)The participants of our projects believe, that the ecologic knowledge gives to them the much more realistic basis for living in the modern, permanently changing environment;
- 2)Many of the participants have changed the views on the priorities in their lives and even have changed their jobs;
- 3)Some of the schoolchildren, who have participated in our projects, stoped smoking and take much more care of their health;
- 4)The part of the student participants of our projects, who were thinking of starting working after the graduation from the universities, have decided to continue their education in the field of environmental sciences.

### **The rise of « Cafés Scientifiques » in Japan and its discontents**

*Yoshiko SAITOH, Tetsuji ISEDA, Kotaro KURODA, Kazuhisa TODAYAMA*

Nagoya University  
Japan

The concept of café scientifique was imported to Japan in 2004. "White Paper on Science and Technology 2004" by Ministry of Education, Culture, Sports, Science and Technology (MEXT) mentioned café scientifique movement in the UK, which led people to become interested in science communication through café scientifique and to try to run their own cafés. Since then, the ideal of café has been adapted and "Japanized". For example, under the initiative and support of such governmental organizations as MEXT, Science Council of Japan and Japan Science and Technology Agency, twenty one cafés were held throughout Japan during Science and Technology Week in the spring of 2006. This top-down approach certainly had some advantage of getting both citizens and researchers acquainted with café scientifique. However, such an approach to promote cafés has been criticized for its being against the original concept of café. We started café scientifique and bar des sciences activities in the city of Nagoya, as a part of the Science and Technology Week events, but after that we have been trying to make our café and bar truthful to the original concept of café scientifique. In the due course, we found some difficulties and suggestions on doing café in Japanese context. The present paper reviews current status and issues of café scientifique in Japan and reports findings from our own experiences.

### **Can Francophone African Universities be involved with Communities?**

*Lamine KANE*

Réseau Africain pour la Recherche Participative, Dakar  
Sénégal

There's none or really a very limited interaction between African Francophone Universities and grassroot Communities. The reason is that Knowledge(co-naissance,in French) is becoming more and more a Monopoly limited in Universities,these so called knowledge Temples.

As a matter of fact, Knowledge is both produced and monopolized by de-rooted scholars who work basically in the French Language which is not the language spoken by the people in their majority. The situation has been going on for ages in Senegal where the French colonial administrators tempted to assimilate the senegalese people via Education.

As a result the French Language remains the sole official language of the Country and the Language of Instruction in the Formal Education System, right from the 1st Day of Primary Education, While National Languages are left for the medium of Instruction in the Non Formal Education System, (Adult Literacy Teaching).

But as time went on the University of Dakar, the dean of African Francophone Universities which was herself a French University in its origin (the 18th French University) lost ground an even disappeared in International Classifications. As a result the Knowledge produced in Dakar is not only limited (few) but also it does not meet International Standards. This poor knowledge situation is due to various factors: Structural Adjustment Policies, Lack of adequate reforms, Non adaptation of Programs and Curricula to African Cultures etc ....

As a final result African Francophone Universities are becoming a more and more remote Institutions, they are becoming more and more aloof and alien Institution with no or very limited interactions with the People.

### **The Science Shop approach of seed sustainability: A competence platform for transdisciplinary learning and research**

*Katja BRUNTIES, Christophe KUEFFER, Arnim WEEK, Gabriela WÜLSER, Thomas CAMERATA, Roger BAUD*

CEO seed sustainability, ETH Zurich  
Switzerland

Transdisciplinarity has become a largely discussed issue in academia as it goes beyond traditional scientific borders. Transdisciplinary research aims at generating socially robust scientific knowledge through collaboration between science and society. Thereby, it builds upon demand-driven, participatory, and multidisciplinary research. Furthermore, it is based on reflexivity regarding (i) the framing of research questions, (ii) the iteration of research and problem-solving, and (iii) the provision of input to traditional disciplinary research. However, while theoretical scholarship on transdisciplinarity proliferates, practicing transdisciplinary research is still rare. Often, structural obstacles such as funding, institutional constraints and career concerns hinder academics getting involved in transdisciplinary research. Seed sustainability is a competence platform for transdisciplinary learning and research in the field of sustainability in higher education, associated to ETH sustainability at ETH Zurich. The platform is located at the interface of science and practice. Its services – seedprojects and seedbox – are targeted at students, professors and practice partners. seedprojects are student-based research projects carried out in collaboration with partners from business, the public domain or civil society. Seedprojects – designed as official Bachelor-, Master- or PhD theses - are part of student's academic education. seed sustainability initiates and coordinates the seedprojects. It takes care of the interface management, the project coordination and provides coaching for students (training and softskills).

The seedbox is an online-pool collecting topics for student-based research in the field of sustainability from a multitude of institutes. It offers a "market" for advertising research projects, an "easy access" to this highly diverse area of investigation and gives an overview of the landscape of sustainability research. Thus, with its services, seed sustainability champions students' commitment to sustainability and facilitates their involvement in the cooperation between society, business and science to jointly develop applicable solutions for sustainability.

We understand the Science Shop setup as an unique opportunity to innovate on and teach transdisciplinary research practices. However, the seed sustainability methodology extends the Science Shop approach in some aspects: (i) seedprojects are selected according to internal quality criteria, and carried out by multidisciplinary student-teams; (ii) emphasis is put on the project-initiation where research questions are jointly negotiated by practice partners, students, and faculty members; (iii) seedprojects go beyond written-up research products (thesis, reports) aiming to develop applicable tools for implementation; (iv) to guarantee high quality, long-term partnerships and a learning-organisation each project is jointly evaluated and supported by a seed-coordinator, trained in transdisciplinary methodologies and coaching.

We will present the philosophy and methodology of seed sustainability, and illustrate it by three examples: (i) an interdisciplinary social science project at the interface of philosophy, sociology and politicalology on the role of ethical thinking in national-level Swiss politics; (ii) a long-term, community-based research collaboration on sustainable tourism planning in Seychelles; (iii) and a sustainable product development process of an awarded start-up nanotechnology company.

### 3.d Knowledge transfer, students and Science Shops

*Transfert de savoirs, étudiants et boutiques de science*

Room / Salle : L213

Chairperson / Président de session : **Jean-Pierre de Grève**, Science Shop Brussels

#### **Science Shops as instruments for knowledge valorisation**

*Tim VAN DER AVOIRD*

Science Shop Tilburg, The Netherlands University  
The Netherlands

Dutch Science Shops are considered to be the cradle of Science Shops and act as an example for other Science Shops in the world. Nevertheless, Science Shops in the Netherlands are a 'threatened species' because of the unwillingness of university boards to invest in them. However, strategic choices made by the Dutch Science Shops might also be the cause of their awkward situation.

The Dutch Government is in the process of developing a new policy on knowledge valorisation. The term 'knowledge valorisation' is a relatively new term in the discussion about the need to turn knowledge into value in a knowledge-based economy. Its origins can be traced back to the European Commission's Lisbon Agenda and the debate about policy measures to turn the European economy into the most dynamic knowledge-based economy in the world (Andriessen, 2006).

Recently, the Dutch Advisory Council for Science and Technology Policy (AWT) advised the Dutch government and parliament not only to focus on economic knowledge valorisation, but it also stressed the importance of the societal, cultural, and democratic value of knowledge valorisation (AWT, 2007). These dimensions of knowledge valorisation open up important opportunities for Science Shops if they are willing to act as instruments for knowledge valorisation.

In the first part of the workshop, the approach of the Dutch Government towards knowledge valorisation will be discussed and the implications and opportunities of this policy will be explored. In the second part of the workshop, participants will be asked to reflect on these issues and invited to add visions on knowledge valorisation and Science Shops with their local situation in mind.

#### **Transforming local communities to knowledge based societies through Science Shops : The case of a local container port in Crete**

*V. MOUSTAKIS, A. SAITAKIS, P. IGNATIADIS*

Technical University of Crete, Science Shop Crete  
Greece

This presentation describes the work of Science Shop of Crete and the Technical University of Crete to help a local community from the South of Crete to assess the social-economic impacts of building a international container port, a project favoured by the National Government in order to bring growth and jobs to the region.

#### **The student as consultant – enhancing the link between student education and community based research**

*Ariette DOMMERING, Gerard STRAVER*

Science Shop for biology, Utrecht University, Wageningen University  
The Netherlands

At most universities in the Netherlands, students are mainly educated in research skills. However, after leaving the university a majority finds employ outside the research field. Both in Utrecht and Wageningen, students have the opportunity in the curriculum to broaden their view on job opportunities. At the same time, they get to know the field of community based research.

We offer the students a course, in which they become acquainted with skills on consultancy, working in a group, etc. They work on a assignment for a real client, answering a question that was originally a Science Shop request. Apart from the subject they explore, they have additional classes in skills required for this kind of work. The clients are often non-profit organizations. The students work in interdisciplinary groups.

Although there are many similarities between the courses in Utrecht and Wageningen, there are also some important differences. The course in Wageningen is obligatory for all Master students. The course in Utrecht is optional for last year bachelor or master students. This results in a scale difference, in Wageningen many more students are reached. Due to the broader range of studies in Utrecht, the variety of students is larger in Utrecht. Biology students work together with heritage or language and literature students. In Wageningen the range of subjects is always within the main themes of the university being environment, life sciences, food and economy and society.

In the workshop at the conference we would like to inform participants of this kind of research and to discuss the pros and cons of this kind of education. The educative setting is only suitable for part of the questions asked at the Science Shops. It asks an open mind and some understanding of our clients. The students must accept the large differences in subjects and clients, and be open-minded for the different kind of classes on skills then they have encountered in their studies so far. Questions to be discussed might be about the role of clients in this setting, the classes needed for this kind of education, the interdisciplinary character and the range of subjects suitable for these courses and the contribution to the interaction between science and society by these courses.

### **Participation of students in knowledge transfer**

*Iris SLIEDRICHT*

Science Shop Tilburg, The Netherlands University  
Netherlands

The Dutch Science Shop of Tilburg University knows a long tradition of working with students as mediators and researchers for short research-projects. The Science Shop started 25 years ago as an initiative of students. The Shop became a permanent part of Tilburg University, the Shop professionalised. To day it is a part of the Centre of Knowledge Transfer specialised in the societal, cultural, and democratic value of knowledge valorisation. The Shop has a permanent staff which works with student mediators contracted by the university for 8 hours a week. They are the representatives of the four university faculties: economics, law, social sciences, and humanities.

The students are very important to knowledge transfer: as mediator between clients of the Shop - the external civil society - and as scientific researcher and representative of the academic knowledge.

The Science Shop enables students to explore the civil society and to serve and use their academic knowledge for societal questions. In addition, the knowledge transfer offers also a surplus value to their academic education.

The students make a link between scientific knowledge and questions in the civil society. The student mediator takes care for the contact between the questioning organization and the researcher. Under supervision of a scientific researcher of the university the student researcher will make a report to be published by the Science Shop. The theme of his bachelor's or master's thesis is related to a research question from a municipality, an NGO, or a partner in the civil society.

In the workshop, I will inform you about our way of working with student mediators and student researchers, the mediation process, and the introduction course for mediators. In the discussion, I am interested in the opinion and experiences of other Science Shops about participation of students in their activities.

### **An online database : the working tool of regional university based - Science Shops allied in a network**

*Stefanie GOOVAERTS, Sofie VAN DEN BOSSCHE*

R&D department, Vrije Universiteit Brussel (VUB)  
Belgium

The Flemish network of Science Shops consists of a central contact point and 5 regional Science Shops based at 5 universities. We call this structure the central-regional model (CR network). Our online database is a tool to manage the incoming demands- with all their information and the complete further follow up- in a structured and uniformed way. Serving both sides of the chain, civil organizations and research-students, requires an efficient tool. Our database has 2 interfaces: a front office (search engine for

students) and a back office (administration part for Science Shops). The main advantages are efficiency, time savings, multifunctionality, and the fact that it is an online application.

Our experience with our first database gave us a good insight in how to collect, dispatch, follow up, and keep an overview of the research topics of the Science Shop network in an efficient way. It resulted in a plan for a new database. We discuss how the new database simplifies the daily work of the different partners in the network in various ways, and acts as an important 'keep all customers satisfied' tool specifically for a CR network of Science Shops.

The database is a perfect tool for each Science Shop or organization who wants to work with a central-regional model

### **What kind of engagement helps reconciliation ?**

*Juliet MILLICAN*

Cupp, University of Brighton  
United Kingdom

This presentation will look at the different models of student community engagement found in different universities and communities across the world. It will look at the ideology behind these models and what they hope to achieve. It will also give a brief outline of a participatory action research project in Bosnia that is working to design and pilot a model of student community engagement appropriate to a generation of students living within the aftermath of conflict. It will raise questions about how students might use the opportunity to work within community organisations in order to contribute to the voluntary and service provision sector and to address questions of identity, citizenship, personal values and belonging.

### 3.e Knowledge, people and agricultural research *Savoirs, citoyens et recherche en agriculture*

Room / Salle : V106

Chairperson / Président de session : **Christophe Bonneuil**, Koyré Center of the CNRS

#### **Do insects fall from the sky? Mapping expert and farmers' knowledge on Bt cotton and insect management**

*Esha SHAH*

IDS, University of Sussex, Brighton  
United Kingdom

While the debate over risk of Bt cotton cultivation is going on, farmers themselves have popularly adopted, developed and diffused the technology in India. Bt cotton was illegally introduced (without the permission from the genetic approval committee of the central government) in western Indian state of Gujarat in the late 1990s at the time when cotton was stopped being cultivated for half a decade due to heavy pest attacks. Since the legal introduction of Bt cotton in other parts of India in 2001, a substantial hike in the production is recorded all over India which is popularly attributed to effective control of American bollworm, the pest that devastated cotton crop for years. This paper maps scientific and lay knowledge on insect management for (Bt) cotton cultivation.

The first part of the paper, drawing from the world wide experiences, historically examines growth and decline of various cotton pests, including varieties of American bollworms. It engages with the scientific debates on how cotton pests follow cycles whose fall and rise could only be contingently and contextually understood, and how they often cannot even be easily explained. The paper then engages with the scientific debates on extent to which Cry 1 AC gene patented by Monsanto and developed specifically for the American situation is capable of controlling the variety of American bollworm prevalent in India. The debates on extent to which the low instances of American bollworms reported in the last five years can be attributed to Bt varieties is also probed. The expert knowledge on rise and fall of other pest vis-à-vis American bollworms and effective methods for insect resistance management are also examined.

The second part of the paper engages with farmers' knowledge on similar issues pertaining to insect management and cotton cultivation. Farmers' knowledge on where do insects come from and how do they damage or benefit cotton plant is centrally examined. Farmers' oral narratives on prevalence of various types of cotton diseases provide ethnographic input on the history of rise and fall of cotton pests. Farmers' insect management practices, cultivation and innovation of Bt cotton varieties, and use of insecticides are examined to contextualise Bt's role in cotton pest management in the current times.

The paper ultimately intends to not only comparatively understand the difference or commonality between farmers and experts knowledge on insect management of (Bt) cotton but also to explore how two sets of knowledge-holders perceive each others' ways of knowing. The question asked in the title "do insects fall from the sky?" is a metaphor that provocatively situates farmers and experts' knowledge in the wider context of historical and political ecology of cotton cultivation. The paper eventually intends to comment upon institutional framework that can bring the lay and expert knowledge interact and learn from each other.

#### **Portuguese State Laboratories and its stakeholders: case stories in agriculture**

*Joana LOBO FERNANDES*

High educational school, Political Institute of Coimbra  
Portugal

Portuguese State Laboratories, namely those concerned with agriculture, fisheries and veterinary, are a very interesting field of research concerning the relationship that is established between researchers and users of that kind of scientific information. They announce the possibility for constructing a dialogical practice and an interdependence of knowings. For these reason, we named this users as stakeholders. In fact, researchers need not only the user's land or activities to do its experimentation, as well as users need researchers to form them, to form the local mediators and for counselling.

Anyway, we will see that this relation is far from being pacific not only because State Laboratories

represent the institutional power but also because of the more recent ways for financing research, EU and national supports that incentivate research not always in the more correct local needs. Therefore, this contribution will focus on the subversive role of financial supports and its influence in researchers and user's communication.

## **Modernisation de l'Agriculture et Résolution du chômage des Jeunes au Bénin et en Afrique de l'Ouest**

*Modernization of Agriculture and Resolution of the Unemployment of Young People in Benin and in West Africa*

*Toussaint HONVOU*

Association Béninoise Pour la Promotion des Orphelins et Enfants Abandonnés (A.BE.E.A)

Réseau Sommet Emploi des Jeunes Bénin (Réseau Yes-Bénin), Porto-Novo

République du Bénin

### 1. Cadre général

Dans le cadre de l'organisation de la 3<sup>ème</sup> Conférence Living Knowledge, l'A.BE.E.A en collaboration avec le Réseau Yes-Bénin propose le sujet de communication ci-dessus mentionné. Ce sujet est inspiré par l'un des thèmes de la Conférence « Innovation et Citoyens : des valeurs ajoutées pour les Communautés ».

Les objectifs de la communication sont de trois ordres :

- Faire comprendre aux participants la nécessité d'allier les expériences de terrain aux résultats des recherches pour un développement réel;
- Mettre effectivement en œuvre la coopération internationale en apportant des solutions durables aux problèmes réels de développement auxquels les plus pauvres sont confrontés;
- Faire prendre conscience que l'agriculture, demeure la clé des solutions au chômage des Jeunes en Afrique de l'Ouest en général et au Bénin en particulier.

### 2. Les origines des problèmes du chômage et du sous-emploi des Jeunes en Afrique

Il faut remonter à la période coloniale et post-coloniale qui a vu naître des cadres formés par les maîtres colonisateurs, préparés à servir les intérêts de la métropole.

### 3. Les deux volets, piliers de la Communication

#### 3.1. L'amélioration des stratégies pour une agriculture moderne au Bénin et en Afrique de l'Ouest;

Elle comprend trois phases :

- Nécessité des études, de transfert de technologies et de formation,
- Montage d'un projet communautaire avec la participation des Jeunes et en faveur des Jeunes,
- Mobilisation des ressources, recherches du marché et exécution dudit projet.

#### 3.2. Constitution et gestion d'un parc d'équipements agricoles

- Constitution d'un parc des équipements agricoles,
- Formation des Jeunes à la gestion des équipements agricoles et transfert de technologies.

En conclusion, la Conférence devra aboutir à :

- Amener les chercheurs du Nord et du Sud et les paysans africains à se compléter dans leurs efforts de développement.
- Amener tous les acteurs de développement à se convaincre que la question de l'emploi des Jeunes passe par le développement de l'agriculture en Afrique et que tout les acteurs de développement devra s'impliquer dans la résolution du chômage et du sous-emploi des Jeunes pour éviter la catastrophe dans un avenir proche.

### **Science in Society or Society in Science? Stakeholder Linkages for Innovations in Mango in Andhra Pradesh, India**

*Laxmi PRASAD PANT, Helen HAMBLY ODAME, Andy HALL, Rasheed SULAIMAN V.*  
School of Environmental Design and Rural Development, University of Guelph, Learning Innovation and Knowledge (LINK) Network of UNU-MERIT, LINK- Centre for Research on Innovation and Science Policy (CRISP)  
Canada, India

The paradox of science-society interactions in India is around the issue of integrating codified and tacit knowledge networks, not just creating new knowledge and bringing it into the society. Recent advances on the systems of innovation thinking as it applies to agriculture and food industries of an emerging economy like India provide a two-fold insight. On the one hand, the codified knowledge networks of the formal sector (e.g., the public sector) customarily focus on scientific research and technology development for increasing productivity than the food safety and quality issues like shelf-life, legislative requirements of the importing country and product appeal for customers. Organizational and organizational issues are important for a successful implementation of science in society. On the other hand, the tacit knowledge networks of the informal sector (e.g., mango growers and commission agents) are not sufficient to set off momentum of an emerging export commodity like mango. The informal sector requires putting scientific recommendations into everyday use.

This study investigates innovations in mango industry in Krishna district of Andhra Pradesh, and specifically stakeholder linkages along and out of the mango supply chain. Although mango has been a substantially researched commodity endemic to the Indian subcontinent, neither the informal sector nor the formal sector was successful to put available codified knowledge into contemporary use. In effect, stakeholders experimented but failed to employ a sea shipment protocol for exporting mangoes to European markets limiting mango air freights to the regional markets in the South East Asia and Middle East. High technology sea shipment containers were often blamed, but as the case study illustrated this was not the complete story. Institutional issues including policies to promote stakeholder linkages were far more detrimental than technological constraints per se. Therefore, policy provisions for innovations in rural development and agriculture like mango production and processing in India should work towards promoting upward spiral of knowledge networks at individual to collective levels over an extended period of time.

### **From Citizens' science through Innovation to Intellectual Property Rights: A Paradigm for University Science Shops**

*S. ANANDKUMAR*

Pandit Jawaharlal Nehru College of Agriculture & Research Institute, Karaikal  
INDIA

Since millennia humanity had been creatively inventing innovations for sustaining life and economic activities with or without assistance of 'formal' science and technology. World over it is now increasingly recognized that resource poor indigenous local communities who have less or no professional and formal education and training, themselves are source of promising, innovative, amazing, real and sustainable technologies (informal science) that are potential intellectual properties. These local innovations / Indigenous Knowledge (IK) Systems are now globally acclaimed and surmounted. But, multiple factors influence extinction of local innovations. Moreover, no agricultural research and educational establishment is spared by the impact of WTO.

Obligated by the TRIPS agreement, agricultural research and educational establishments in countries in transition have to be increasingly competitive. Hence, research and educational establishments are ordained to raise up to the expectations to usher in knowledge security to rescue humanity from the loss of information essential to make living possible on earth. The serious question is, "How to conserve and sustainably use indigenous knowledge using the strengths of globalization?" Here is a paradigm [enclosed] with two pathways. One is to scout, document, digitize, developing and managing database, networking, evolving expert system using collective information available through networks, and transfer of indigenous technology for the poor using information and communication technologies.

The next pathway, which depends on the linkage and coordination of the former, envisages participatory technology development using indigenous knowledge, then scaling up, followed by product and process development, protecting the same as intellectual properties, further commercializing the intellectual properties derived from indigenous knowledge, later spawning and finally marketing the products and

processes based on indigenous knowledge for benefit of all concerned. Not to forget and devoid the citizen or the community that invented the indigenous knowledge. There shall be mandatory ethical provisions in the universities for sharing the benefit accrued from commercialization of indigenous knowledge with the community or citizen.

The university Science Shops can initiate programmes using the paradigm of transformation of citizen's innovation for conservation and sustainable utilization and benefit sharing with the citizen and or community for their creativity and innovation.

### **La co-construction des connaissances entre chercheurs et agriculteurs dans les processus d'innovation : enseignements tirés d'un projet en agriculture familiale dans les Cerrados Brésiliens**

*Patrica LENNÉ, Eric SABOURIN, Bernard TRIOMPHE, Eric SCOPEL*

IEDES, CIRAD UPR Arena, CIRAD UMR Innovation et Développement, CIRAD UMR SYSTEM

Brasil, France

Remettant en question les pratiques dominantes d'un transfert aux agriculteurs, par les services de vulgarisation des innovations techniques pré-conçues par la recherche agronomique, le projet Unai qui travaille en région de petite agriculture familiale du secteur Réforme Agraire dans le municiple d'Unai (Minas Gerais, Brésil), s'inspire du corpus méthodologique de la « recherche-action ». S'appuyant sur un dispositif de recherche-expérimentation-formation, il associe agriculteurs, chercheurs, éducateurs et agents de développement au processus de construction d'innovations socio-techniques et organisationnelles en partenariat (CIP). Différentes portes d'entrée sont utilisées que ce soit dans le domaines technique (intensification laitière, commercialisation des fruits natifs des Cerrados, systèmes de culture en semis direct), ou dans celui du renforcement des capacités des agriculteurs et de leur organisations via la formation et le soutien à l'action collective.

Dans le cadre de ce projet, une analyse sociologique des mécanismes et situations de confrontation des connaissances entre chercheurs et agriculteurs autour de la mise en place de systèmes de semis direct a été réalisée. L'objectif de l'étude était d'analyser les interfaces, complémentarités et difficultés en termes de confrontation et de mise en commun de connaissances produites. L'hypothèse centrale est que pour parvenir à une « co-construction de connaissances » entre différentes catégories d'acteurs, il est nécessaire de prendre en comptes les différences de point de vue, la diversité des formes de connaissance et des systèmes de valeurs.

L'étude a permis d'identifier différents éléments du processus de dialogue et de confrontation des savoirs en termes d'objets, de dynamiques d'acteurs et de valeurs associées aux dynamiques des connaissances. L'association des agriculteurs à la conception et aux dispositifs d'expérimentation de l'innovation "semis direct" pose des problèmes méthodologiques en termes de points de vues sur les objets et les méthodes, de cadre de référence, de temporalité, de répartition des rôles respectifs, d'assimilation des statuts, de formalisation des responsabilités de chacun. Un effort d'adaptation mutuelle est nécessaire; il passe par le recours à des mécanismes de traduction et à la mise en place d'acteurs ou d'objets intermédiaires par exemple via la formation de techniciens locaux ou l'identification d'agriculteurs-expérimentateurs.

### 3.f Research policy and Global networking in community research *Politique de recherche et stratégies des réseaux de recherche participative*

Room / Salle : L108/L118

Chairperson / Président de session : **Rajesh Tandon**, Participatory Research in Asia

#### **Global networking in community research**

*Rajesh TANDON, Budd HALL, Paulo WANGOOLA, Lamine KANE*

Society for Participatory Research in Asia, Office of Community-Based Research - University of Victoria,  
Mpambo - Afrikan Multiversity, Senegal Participatory Research Network  
India, Canada, Uganda, Senegal

Globalisation has resulted in uneven economic development both within nations and amongst nations. The rich nations have grown wealthier and the poorest nations more vulnerable. Knowledge production of a formal nature is similarly mal distributed. The rich institutions within the wealthy countries and the wealthier institutions within the majority world account for a disproportionate amount of research production and research funding. This panel explores the challenges of democratizing knowledge production within the practices of community-based research. It looks at alternative structures in India, Senegal and Uganda as well as the potential for global networking for poverty reduction and action.

#### **Creating Global Linkages through Issue-based Grassroots Research: Researchers and Activists Promoting Stable Racial, Ethnic, and Economic Diversity in Local Communities**

*Phil NYDEN, Gwen NYDEN*

Center for Urban Research and Learning, Loyola University Chicago  
U.S.A

Through an analysis of the findings and impacts of multiple collaborative university-community research projects on factors producing stable racial, ethnic, and economic diversity in urban communities, we discuss how community-based research can enhance the work of organizations working for social change and contribute to policy changes at local, regional, national, and international levels. The Loyola University Chicago Center for Urban Research and Learning (CURL), an eleven-year-old large, collaborative university-community research center, has completed numerous projects focusing on promoting racial, ethnic, and economic diversity. These have included: 1) a nine-city study of stable diverse communities in the U.S. (using collaborative researcher-activist teams in each city); 2) research on the impact of the gentrification and displacement cycle on communities of color in Chicago; and 3) international exchange visits of policy researchers and community leaders (including Birmingham and Liverpool UK; Venice, Italy; Seville, Spain; and Sydney, Australia) to discuss sustainable urban policies that promote stable diversity and economic inclusion.

We use these local, national, and international research experiences to discuss how issue-based and community-level research can serve as the organizing principle for globally-linked, but grassroots-anchored, research and action. We will discuss: 1) how this work has been the basis for the creation of ongoing research relationships among Science Shops in multiple countries, and 2) how the research has been used at the local level to develop new policies and organizing approaches in creating more equitable communities as cities and nation experience increased racial and ethnic diversity.

### **Structural embedding of Science Shops in a governmental science communication policy**

*Sofia VAN DEN BOSSCHE, Jean-Pierre DE GREVE*

Vrije Universiteit Brussel (VUB), Belgian Science Shop Unit  
Belgium

In general, universities have three responsibilities related to governmental funding: research, education, societal services. Within the latter part of the mission, the Flemish government coupled the funding of a network of Science Shops to the realization of various other objectives related to science in society actions and to science communication. These other objectives include contributions to the realization of the Lisbon objectives, raising interest for technology in education, and enhanced science communication. The core of the initiative is a Flemish network of Science Shops configured in a central-regional (CR) structure.

In this paper we want to clarify the role that Science Shops play in communicating science to the community by pointing out convincing achievements for the government. We will highlight the 'white paper on science communication' and its working plan, that where requirements for the funding, and discuss some of the challenges and opportunities offered by the embedded CR network of Science Shops. The Flemish model of interaction between government and higher education may serve Science Shops in other countries.

### **The integration of public input into the American nanotechnology federal program: Meanings and Contradictions**

*Brice LAURENT, Erik FISHER*

Arizona State University - Ecole des Mines de Paris  
U.S.A, France

Nanotechnology has become a major area of public interest in the United States. The 21st century nanotechnology research and development act was signed by President Bush in 2003. The act authorizes appropriations for nanotechnology research and requires the "integration" in the federal nanotechnology program of "public input" and proposes to use "citizen's panels" or "consensus conferences".

The notion of integration is widely used in American policy documents about nanotechnology, yet rarely deeply explored in terms of meanings, ends and means. In a technological area such as nanotechnology where social science research receives large amount of funding from the federal government to study "societal implications" and "engage the public", it seems necessary to understand what is expected from social scientists and the public, and, in return, what could be expected from apparently progressive pieces of legislation such as the 21st century Act.

This paper seeks to analyze the call for the integration of public input by going further than the criticism of cooptation one the one hand or, on the other hand, the un-reflexive enthusiasm for an exceptional opportunity for the public to participate. Using a body of nanotechnology-related texts from federal agencies, the National Academy of Science and hearings at Congress, this paper proposes to investigate the notions of the "integration of public input" in federal nanotechnology programs. In particular, we will show that different visions of the "integration" of public input in nanotechnology research are present in this body of texts. They are related to different understandings of the purpose and control of technological evolution, the role of social science in this process, and the objectives of public involvement in nanotechnology research and policy.

These different visions are not always clearly distinguished in the policy documents we study. In particular we will show that there are ambiguities and uncertainties in the references made to the potential roles of social scientists and the public. As a result, contradictions exist – contradictions that also create possibilities for alignments between positions that could seem opposed.

Commenting briefly on examples from museums of science and academia in the United States, we will conclude by detailing the potential usefulness of our analysis for the practitioners of public engagement in nanotechnology.

## **On the road from community-based research to a national policy agenda : seeking the impossible ?**

*Linda HAWKINS, Jessica BALL*

Centre for Families, Work & Well-Being, University of Guelph; University of Victoria  
Canada

A Canada-wide network of community-university research projects investigating fathers' roles in child development and promoting father involvement is used in this presentation to illustrate dilemmas in moving from community-specific research focused on local social problems to a national policy agenda. The networked project example is funded by the premier federal funding agency for social science research in Canada (SSHRC), under the Community-University Research Alliances program. Seven component cluster projects focus on a different population of fathers in Canada, including: immigrant and refugee, Indigenous, gay, separated and divorced; young, and new fathers, and fathers of children with special needs. Each project involves a university-based researcher working in close collaboration with one or more community-based family-serving agencies, with additional investigative teams exploring cross-cluster themes; demography of fatherhood in Canada; and policy issues affecting fathers' involvement.

This presentation addresses challenges encountered by later stage alliances - moving from successful local engagements between universities and population-specific communities to a desire to have national engagement of politicians and policy makers in order to effect macro-system social change. These challenges occur in the context of a very successful alliance with respectful relationships between university and community team members, with research designs and new tools developed that fit local resources and opportunities (including two-way memoranda of agreement, and multi-tier, iterative informed consent procedures, two-way training of community- and university-based researchers to decide on data collection, analysis, evaluation and successful dissemination strategies). Promising steps have been taken to mobilize new knowledge locally and regionally according to the identified needs of each population of fathers and the partnering agencies, and regular formal and informal networking has allowed for continued knowledge mobilization amongst team members and the wider communities. Yet, difficulties have been encountered in operationalizing specific results from the local to terms of national level actions. These difficulties appear to be due in part to the contrasts in population specific issues, the significant geographic range of project locations, and the improbability of speaking with one clear voice due to different interests and processes used by researchers compared to advocates.

How do the guiding principles and lessons of successful community-university partnership research apply to an agenda to animate a national movement towards policy changes and program investments to promote fathers' involvement? How can advocates translate research findings into clear messages and recommended actions for politicians and policy-makers without trammeling on the value that researchers place upon nuanced, contextualized understandings with explicit limits to generalizability? That is, how can research findings be mobilized while avoiding a reduction to slogans and over-simplified explanations? How can demonstrations of successful community-level actions flowing from research be shared at a national level without invoking the neo-colonial concept of 'best practices'? Answers to these questions might require an appreciation of the roles and limits of research in social advocacy. This presentation will offer a perspective on approaches that circumvent some seemingly inherent contradictions in moving from understandings and solutions derived from more local community engagements in science to national movements to effect broad social change.

## **The Living Knowledge Network – International Networking of Science Shops**

*Norbert STEINHAUS*

Science Shop Bonn  
Germany

Science Shops and similar organisations in Community Based Research (CBR) in general are small and local entities, bound to local conditions. They are highly diverse in respect to organisational structure, focus and funding. A network allows for breaking out of the local. Facilitating collaboration and cooperation broadens the base of knowledge and experience. Living Knowledge focuses on strategic issues and is active within political settings.

The European Commission has encouraged the implementation of an international Science Shop network, supporting the development of structures and tools for the dissemination of the work of Science Shops. The Living Knowledge Network's activities now focus on different levels, ranging from strategic networking to training of individual skills and from information to mentoring of old and new Science Shop practitioners. A summer school focussing on new Science Shop initiatives is one of the offered tools. The network can also create opportunities for thematic research co-operations.

The presentation will give an overview of the development and the impacts of Science Shops and the Science Shop network in Europe. It will describe the network's existing tools and infrastructures such as discussion list, website, newsletter, magazine, as well as international co-operation and training activities. This presentations intends to be followed by a discussion about the future of the Living Knowledge Network during the conference's Open Space session.

**Saturday, the 1<sup>st</sup> of September- Samedi, 1er septembre**  
**Open Space**  
from 11.30 to 13.30

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## Open Space

Facilitator: Khan Rahi from the Loka Institute/CRN & CCRN, US/Canada

The open Space will provide you a series of unstructured, non-lecture style discussions by convening a Circle for a topic within the general theme of a session. Participants will be encouraged to mill around in the marketplace and sign up for topics of their choice. A facilitator in each Circle will guide the conversation along the track.

All participants are encouraged to convene a Circle on a topic or set of questions. A facilitator will come around and post the space assignments.

Khan will be at the Registration Desk to provide you the Guidelines and further information or respond to any questions you might have. Open Space presenters already assigned, please come to the Registration Desk to pick up the Guidelines.

### **Open Space topics already assigned :**

#### **NanoVisions: How Can Killer Robots Save the World?**

*Fern WICKSON, Kamilla KJOLBERG*

Centre for the Study of the Sciences and the Humanities, University of Bergen  
Norway

This workshop will both build on and contribute to a research project on social and ethical interactions with nano-scale science and technology. A nanometer is billionth of a meter and research on this scale allows for the direct manipulation of atoms and small molecules. Our research project aims to create opportunities for researchers working at the nano-scale to reflect on social and ethical dimensions of their work, as well as opportunities for citizens to participate and exercise influence 'upstream' in research processes. One of the strategies we are developing for this 'upstream' engagement of civil society in scientific research is an interconnected series of envisioning exercises. In this workshop we offer an opportunity to participate in one of these exercises and to critically evaluate the process.

In the first stage of our work, we have conducted an exercise with early career nano researchers, attending the PhD course "NANO – Science, Technology and Ethics". We asked them to creatively imagine the role of nanotechnology in the world in 30 years time. We also specifically asked them to project their current research project into this future and describe the key areas of health, education and the environment. Each 'NanoVision' was then opened to discussion and ethical reflection by the full group of participants, which included natural and social scientists. The aim in conducting this initial exercise was three fold:- 1) to create a space for scientists to actively consider the social and ethical dimensions of their work, 2) to understand the hopes, concerns and visions nano-scale scientists have for their research, and 3) to generate feasible examples of nanotechnologies for use in subsequent exercises. The second stage of our envisioning process is to take these examples of predicted applications and ask different groups of citizens to incorporate them into their own NanoVisions of the future. We are particularly interested in visions of less predictable outcomes (such as killer robots saving the world) and radically different situations (such as an Islamic fundamentalist Europe). Scientists will be invited to participate in this stage and those unable to take part will be given reports on the visions and discussions generated.

This conference workshop will trial the second stage in our envisioning process. Participants will work to creatively develop visions of a nanotechnology future, incorporating previously gathered predicted applications. Each NanoVision will then be presented for open discussion and ethical reflection. We will document both the visions and discussions and take this information back to the nano researchers we are working with, to encourage their further reflection on their research processes and projects. This feedback process means that this workshop offers participants a unique opportunity to influence the future of nanotechnology research!

**Working for an alternative economy***Frank BECKER, Wolfgang ENDLER*

Technical University Berlin, Centre for Cooperation (ZEK), Cooperation and Consulting for Environmental Questions (kubus), Technical University Berlin, Centre for Cooperation (ZEK), Cooperation and Consulting for Environmental Questions (kubus)  
Germany

**The contribution of Science Shops to a political economy of sustainable development**

Science Shops deal with complex problems with the goal of finding innovative and viable solutions. In social, environmental and technological fields we often find it relatively easy in our thinking to cross the boundaries between disciplines. But in the field of economy we all too frequently remain caught up in traditional views of profitability or leave the economic aspects completely unconsidered.

The authors argue that the development of innovative economic solutions should become a more central element of the work of the Science Shops.

How can Science Shops participate in the development of viable economic structures, in order to make projects more successful?

For example, under what conditions can a cooperation project become a self-sustaining network after the end of external project funding?

**Methodology / Approach:**

The participants in the workshop are invited to take part in a practically oriented dialogue which draws on their own experience, both positive and negative. The impulse will be provided by practical examples from our work at kubus (re-use and continued use of consumer goods, establishment of a regional network of small enterprises) as well as from other intermediary institutions. The main focus will be on the methodology of the approaches.

**Justification and background:**

Why do we see the failure of so many social and environmental initiatives in European countries e.g. relating to Agenda 21? A key reason is that within the dominant neo-liberal system the interaction of civil society groups is affected by economic constraints just as much as all other areas of society. In other words, the logic of the economics is placed above all other aspects of our social coexistence. Anything that is not economical makes no sense. If something does not cost anything it is not worth anything.

The economist Karl Polanyi (Trade and Markets in the Early Empires, Glencoe, Illinois, 1957, The Great Transformation, Frankfurt am Main, 1978) characterises this as the “dis-embedded economy”, i.e. the economy is no longer embedded in the material and social processes, but is disconnected from and ranked above these.

Approaches aimed at increasing efficiency and conserving resources fail completely due to the Rebound Effects of a constantly advancing technological feasibility mania. Where savings are achieved they are eaten away by the expansion of consumption.

Many promising steps towards a sustainable development are possible within the framework of an economy that opts for “zero-sum material games”. This has been shown by among others the economist Niko Paech (Nachhaltiges Wirtschaften jenseits von Innovation-orientierung und Wachstum, Marburg, 2005). A deceleration of the resource and energy consumption does not seem possible without a deceleration of the economy.

The workshop aims at initiating a dialogue in the Science Shop network. On the basis of practical implementation the economic aspects of sustainable development should be opened for the work of the Science Shop network.

A possible result could be a joint thematic cooperation of various Science Shops (about the European Union electrical and electronic waste directive WEEE [http://ec.europa.eu/environment/waste/weee/index\\_en.htm](http://ec.europa.eu/environment/waste/weee/index_en.htm)).

**The future of the Living Knowledge network***Norbert STEINHAUS, Henk MULDER, Caspar DE BOK*

Science Shop Bonn, Science Shop for Chemistry – Groningen, Utrecht University - International Science Shop  
Germany, The Netherlands

One of the main conclusions from rather recent statistical analysis of the Living Knowledge network

is that there is a small group of actors that are active to very active in the network, compared to a big group of actors that are not active or somewhat active in the network. Some active members are for a small part paid for their extra time for network activities through consecutive EU-projects, which thus far enabled website, conferences, support for new Science Shops and our journal and newsletter. Also, surveys and studies have been financed through EU funds, to ultimately benefit the networking of Science Shops and thereby advance the visibility and work of Science Shops - leading to improved public access to, and influence on, research.

New Science Shop projects are funded by the EC. These projects do not include structural support to maintain a network infrastructure and general network activities.

Taking into account that the end of the EU funded period for general LK network activities is close, the challenge for the near future is to find an organizational structure and procedure to continue the substantial (centralized) support for the network and its associated members. We also want to discuss the options for actors that would like to become more active in the network to do so.

➤ The aim of this workshop is to discuss

- objectives and tasks of Science Shops in the network
- the (organisational) structure of the future LK network
- the future role of the international contact point of the LK network
- maintenance of existing support and supplies (website, newsletter, discussion list, lobbying, .)

➤ access to, and benefits from the network

- who does what (tasks and duties)?
- funding opportunities (Science Shop foundation, membership fees, project funding, .)

We will also start to discuss about the 4<sup>th</sup> Living knowledge conference.

## Supporting Social Change through Project-Based Research

*Randy STOECKER*  
University of Wisconsin  
U.S.A

Community-based research is often conducted without careful connection to actual community change strategies, thus reducing the usefulness of the research and limiting the impact of the community change strategy. This workshop will focus on the four stages of a community change process--diagnosis, prescription, implementation, and evaluation--and discuss how to develop research methods to support each stage. Participants will learn how to judge which stage a community change effort is at, and how to collaboratively design research projects that will best serve the community change effort at each stage.

**Dernière minute :**

**Plateforme de discussion sur le Grenelle de l'environnement**

**"Grenelle de l'environnement: les enjeux pour l'expertise, la recherche et l'enseignement supérieur"**

Plateforme d'échange avec notamment les invités suivants (sous réserve): Alexis Deck (Fac Verte), Jacques-Olivier Barthes (WWF), Elise Demeulenaere (Fondation Sciences Citoyennes), Christophe Bonneuil (Fondation Sciences Citoyennes), Hélène Gassin (coordinatrice de l'Alliance pour le Grenelle), Dominique Bourg (Pr. U. Troyes), Pierre-Henri Gouyon (Pr. MNHN), Dominique Dron (Chaire du devt durable, ENSMP), Pierre Radanne (4D, ancien dir. de l'ADEME), Bernard Chevassus-au-Louis (Inra, ancien pdt du MNHN), Patrick Viveret (GRIT), Philippe Quirion (RAC et CIREC), André Cicoella (INERIS et Sciences Citoyennes)...

Cette rencontre se tiendra en parallèle à la conférence le samedi 1er septembre de 11h30 à 13h30 dans la salle V119 à l'Ecole des Mines.



**Saturday, the 1<sup>st</sup> of September – Samedi, 1er septembre**  
**Plenary**

from 14.45 to 15.30

**Conference video**

from 15.30 to 15.45

**Closing of the conference**

from 15.45 to 16.30

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## Plenary

### Amphithéâtre Poincaré/ Elie de Beaumont (L108/L118)

Chair : Jean-Pierre de Grève, Science Shop Free University Brussels, Belgium

With

#### **=> Helen Wallace, GeneWatch, UK : Corporate shaping of research agendas in the biosciences**

In March 2000, European Union heads of state met in Lisbon and adopted the Lisbon Strategy, which aims to make the EU the "most dynamic competitive knowledge-based economy in the world". The Europe Union as a whole perceives itself as weak in translating the results of research into innovative products and services that can boost competitiveness. It has identified an 'innovation gap', which is seen as reflecting weaknesses in areas such as links between research and industry. The Lisbon Strategy placed innovation at the heart of the EU policy agenda and aimed to address the gap by means of a 'research push'.

This paper will report the preliminary results of an investigation into research funding for biosciences in the UK and the European Union, including the development of the Framework 7 Programme. The paper examines the corporate shaping of science, innovation and the economy in the UK and EU, including the role of the Lisbon objectives. The paper argues that the current system of setting research priorities is undemocratic and too skewed towards the priorities of commercial companies and wealth creation. This leads to important areas of research being neglected that could contribute to better health and more sustainable agriculture. Ways of improving the system are suggested so that more people have a say about what research is done, with the aim of developing a research agenda that better reflects the needs of people and the environment.

H. Wallace is director of GeneWatch UK, a not-for-profit group that monitors developments in genetic technologies from a public interest, environmental protection and animal welfare perspective.

#### **=> Angelika Hilbeck, ETHZ: Problems of independent research in environmental sciences in the age of corporate domination**

Through global industrial concentration, private-public partnerships and intellectual property rights (IPR), knowledge increasingly becomes private property – a commodity that cannot be shared freely but is used for profit making of a selected group of society. This privatisation of the "commons", obvious for example in the sector of genetic engineering and agri-biotech, is a major threat to independent science in today's scientific environment: scientists raising critical issues put their careers at stake, or their funding is simply cut off. In a globalized world where transnational corporations increasingly dominate national politics, increasing amounts of corporate money are used to 'sponsor' research at public universities and research institutions, directing 'independent' research towards fields of primary corporate interest which is not necessarily society's interest. In the field of environmental biosafety in relation to genetic engineering, there have been numerous accounts of corporate interference with public sector science, to the extent that biosafety research became a 'technology enabling' exercise rather than a critical independent outside assessment. Independent scientists when publishing 'inconvenient' data, face a global corporate opposition largely as individuals and are attacked in orchestrated campaigns at that level. To stop this trend, new alliances and networks must be created and launched at international effective levels. It is urgent that civil societies reconsider their role in shaping science in a globalized world.

A. Hilbeck is a senior researcher at the Swiss Federal Institute of Technology, Institute of Integrative Biology. Specialised in entomology, she is the author of numerous scientific research papers in the field of environmental biosafety and a member of the Roster of Experts of the Biosafety Clearinghouse of the Convention on Biodiversity (CBD).

**=> Claudia Neubauer, FSC, France: Vers un nouveau contrat entre recherche et société**

Nos sociétés traversent trois transformations majeures qui sont autant défis pour nos institutions de recherche et leurs rapports à la société: la marchandisation de la science, la montée des aspirations citoyennes et l'entrée dans un monde fini. Il s'agit donc de refonder notre système de recherche autour d'un nouveau contrat entre recherche et société, de nouvelles missions et orientations de la recherche et de nouveaux modes d'interaction avec les acteurs de la société civile porteurs de besoins et d'intérêts non marchands.

Une partie du monde de la recherche et de la politique de recherche commence à prendre conscience de l'intérêt d'une alliance forte entre acteurs de la recherche publique et la société civile. De nombreuses expériences et des dispositifs innovants ont vu le jour (ARUC au Canada, PICRI en France, ouverture de la Commission Européenne sur les questions de science et société, recherches participatives, conférences de citoyens, etc.), mais beaucoup reste à faire car il s'agit aussi de transformer les orientations dominantes, les modes de décision et les pratiques d'expertise. Pour ce faire, l'espace public doit être réaffirmé comme un espace de négociation de l'innovation et des choix scientifiques et techniques.

C. Neubauer est co-fondatrice et coordinatrice de la Fondation Sciences Citoyennes.

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Following this plenary and if everything goes fine, we plan to show you a **conference video** of around 15 minutes that Jens Bonk and Norbert Steinhaus from WiLaBonn and Glen Millot from Fondation Sciences Citoyennes will prepare for you during the three days.

Si tout va bien techniquement, nous comptons vous montrer **une vidéo de la conférence** que Jens Bonk et Norbert Steinhaus de la boutique de sciences de Bonn et Glen Millot de la Fondation Sciences Citoyennes auront préparé pour vous.

## **Conclusions and closing of the conference – Conclusions et clôture de la conférence**

Chairing: Caspar de Bok and Claudia Neubauer

with

### **=> Dominique Pestre : Reflections from the conference**

D. Pestre is director of research at the Ecole des Hautes Etudes en Sciences Sociales, EHESS, Paris, France. He will present his ideas as « grand témoin » of the conference.

D. Pestre présentera ses idées en tant que grand témoin de la conférence.

### **=> Norbert Steinhaus : Outlooks for the Living knowledge Network**

Norbert Steinhaus is the director of the Science Shop in Bonn, Germany.

N. Steinhaus est le directeur de la boutique de sciences à Bonn, Allemagne.

### **=> Gus Massiah : International cooperation and the idea of a World Social Forum of Science in 2009**

G. Massiah is co-founder of ATTAC France and president of the biggest French NGO on development and international cooperation (CRID - Centre de Recherche et d'Information pour le Développement).

G. Massiah est membre co-fondateur d'ATTAC France et président du CRID.

### **Acknowledgements / Remerciements**

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Our volunteers / Nos bénévoles : Régine, François, Tsouria, Dominique, Laurent, Philippe, Marie, Marine, Maëlys

We hope we did not forget somebody! / Nous espérons que nous n'avons oublié personne !

**Hope to meet you at the 4<sup>th</sup> Living knowledge conference!**

**Nous espérons vous revoir à la 4<sup>e</sup> conférence Savoirs Vivants !**