

Nanobio-RAISE Second Meeting

10 December 2006, Mercure Hotel, Frankfurt am Mainz

Minutes

Present: David Bennett, Henriette Bout, Richard Braun, Donald Bruce, Marion Godman, Amanda Hayhurst, Richard Hayhurst, George Khushf, Karel Luyben (chairman), Elly Muilman, Patricia Osseweijer, David Rickerby, Klaus-Michael Weltring, Christoph Steinbach, Johan Vanhemelrijck, Susanne Sleenhoff

Work-package discussions:

WP1: Co-ordination activities

David Bennett reported that overall the co-ordination is going fine and smoothly. He signalled for consideration during the ensuing discussions to be considered in detail under Items 4 and 5 that he proposed asking the Commission for extension of the project for the dissemination activities.

WP1: Expert working group

Donald Bruce has established a working group that will focus on Human Enhancement. The group consists of: Francois Berger, Donald Bruce, Richard Jones, Alfred Nordmann, Andy Miah, Ottilia Saxl and Brian Wynne. There is room for one person more.

The group intends to work on three case studies:

- Electrical implants
- Sport enhancement
- Neuron-chip interfacing

The group will also discuss more basic issues such as 'What is enhancement?'.
Dr Bruce plans to produce the draft final expert working group report in early Summer 2007 that will be finalised in September 2007 after its last meeting. He was considering other outputs in addition to the report such as stand alone type documents and individual publications.

Three questions were raised by the chairman:

1. The composition of the group in that most come from the UK and where is their background in nanotechnology?
2. What is the relation of the subject to nanobiotechnology?
3. The meetings are intended to give input to the Horizon Scanning Workshops so how are they going to this?

Most of the people are from the UK because of budget limitations. George Khushf would be welcomed to join the group if budget allows.

Christoph Steinbach knows members of the DECHEMA Nanofachsektion who could join the working group. Donald Bruce will be in contact with Christoph Steinbach about names and contact details.

Johan Vanhemelrijck asked if it was possible for Nanobio-RAISE partners to be circulated with details of meetings of the Expert Working Group with a view to attending? The answer was affirmative.

There was discussion about framing the topic of human enhancement in a broad context including the positive, negative and feasibility over time of different forms of human enhancement.

WP2: Horizon Scanning Workshops

The first workshop has been organised at Munster jointly with Nano2Life ELSA Working Group and was very successful. It is intended to produce a book on implants and neuroaspects based on the presentations.

A third Horizon Scanning Workshop on Theranostics will be held on 6-8 June 2007 in Münster jointly organised with Nano2Life with three possible subjects:

- Smart devices (insulin pumps)
- Diagnostics combined with therapy (everyone their own medication)
- Nanoparticles in therapy (e.g. the use of nanoparticles to target cancer)

Many people were in favour of the third option for various reasons.

The Second Workshop will be held on 19-20 March 2007 organised by Christoph Steinbach at DECHEMA in Frankfurt on nanoparticles in food and the environment.

He knows many nanoscientists in Germany but not in other parts of Europe.

David Bennett will propose others from through out Europe, Richard Hayhurst in Norway and Donald Bruce referred to participants at the conference on *Nano- and Micro- technologies in the Food and Health Food Industries* in Amsterdam organised by the Institute of Nanotechnology. It was proposed to also contact ILSI in Brussels.

Further it was discussed that risk assessment of nanoparticles must be addressed.

WP3: Focus Groups

Marion Godman reported having just finished all four planned focus groups in Sweden, Great Britain, Poland and Portugal with draft reports of the first two sessions. All that needs to be done is writing the overall final report. **The outcome will be used for the first press release of the Nanobio-RAISE project at end-January 2007.**

WP3: DEMOCS card game

Donald Bruce will have the DEMOCS cardgame finished by **February/ early March 2007** so it can be played from **March till June 2007**. The focus group findings will be used for input in the development of the game.

Henriette Bout offered to play the game with 200 of her students from May to July 2007.

Johan Vanhemelrijck also offered to play the game with entrepreneurs.

WP 4 Information and Dissemination

Briefing Papers

Four briefing papers will be produced.

- Donald Bruce on ethics in relation to nanotechnology,
- Sven Ove Hansson on public perceptions in relation to nanotechnology,
- Alfred Nordmann on nanomedicine,
- Frans Kamper on food and environmental applications of nanotechnology.

The basic documents will be converted into texts for politicians, scientists and the general public. **The deadlines for the first drafts are from January to March 2007.**

There was further discussion about extending the period of the project contract to allow time for full dissemination of the project's outcomes to achieve their maximum impact. There was general approval with the reservation that the timing for the planned activities must not be allowed to slip and must be adhered to.

There was a brainstorming discussion in preparation for the development of a **detailed communication plan for the outputs of the project:**

Invited multistakeholder workshop under Chatham House rules (Scientists, Industry sectors)

Book on the outcomes of the expert group (Scientists)

Conference (?)

Publications in Nature, Biotech (Scientists)

Special meetings (opinion leaders)

Briefing Papers (people, scientists, politicians)

Press releases – Alpha Galeleo (public)

Course book (lecturers)

EU report (EC)

Journal papers (methods) (Scientists)

Science Centers/ Museums (public)

Card game (public)

Invited speakers at conferences (scientists, industry)

Commercial conferences (industry, public)

BBC Radio (public)

Blogs (public, scientists)

WP 5: Oxford Courses

For the project there will be two courses on *Strategic Communication and Applied Ethics in Nanobiotechnology* organised at St Edmund Hall in Oxford, the first on 11-16 March 2007 and the second on 23-29 September 2007.

Susanne Sleehoff will be contacting the lecturers in January 2007 for their contributions to the course book.

The brochure for the March course has been widely distributed at conferences etc. and is on the Nanobio-RAISE and many other websites.

So far 15 people showed direct interest in the course and 8 registrations are completed.

For the September Course the programme will be revised including to involve more nanotechnology scientists.

There were also suggestions from others to distribute the course brochure:

By Marion Godman to contacts in Poland

By Donald Bruce to Paul Galvin's laboratory in Cork and Peter Green

Financial report

Elly Muilman presented the report for the first year of the project which was approved.

Relations with other EC projects

David Bennett reported on several other projects that deal with nanotechnology, public communication and ethics. **Susanne Sleehoff will make a brief summary of all the projects to be circulated.**

European Commission FP7 forward planning

David Bennett reported on various activities and meetings in preparation for FP7 with the overall aim of ensuring that public communication and ethics are effectively embedded in FP7 projects from the outset.

Date and place of the next meeting

It was decided to hold the third and final Steering Group Meeting if the project is extended at end-2007 or early-2008 at a date and place to be decided.