

NANO2LIFE EU PROJECT - BRINGING NANOTECHNOLOGIES TO LIFE

Patrick Boisseau (CEA, France)

Nano2Life (N2L) is the first European Network of Excellence in nanobiotechnology supported by the European Commission under the 6th Framework Programme. Its objective is to support European scientific excellence and industrial competitiveness in nanobiotechnology and nanomedicine by merging existing European expertise and knowledge in the field of Nanobiotechnology. Founded in 2004, N2L comprises 23 major European organizations and 41 industrial companies within the field of Nanobiotechnology as well as associate members from EU candidate countries.

The Network acts as an European nanobio think tank supporting a strong exchange of knowledge, ideas and vision among its members through the incubation of joint research projects; the networking of intellectual and technical resources; new education and training courses and the transferring of technology.

Nano2Life aims at setting the basis for a virtual European Nanobiotech Institute, focused on the understanding of the nanoscale interface between biological and non-biological entities, and its possible applications in the area of complex and integrated novel sensor technologies for health care, pharmaceuticals, environment, security, food safety, etc.

The benefits for citizens from nanobiotechnological research are expected to be several, for example the development of a more personalised and less invasive medicine, and more thorough control measures of the environment and food.

The medical benefits are based on the miniaturisation, sensitivity and integration of several functions in a single device. This will bring a more sensitive and faster medical diagnosis; a more efficient therapy with less side effects, and new artificial replacements of deficient functions in regenerative medicine.

In order to accomplish its goals, N2L has more than 400 scientists presently involved in a Joint Programme of Activity (JPA) aiming at:

- creating the first ever technological roadmap for Nanobiotechnology,
- identifying the key bottlenecks that need to be overcome in Nanobiotechnology,
- founding the first European Ethical, Legal and Social Aspects Board (ELSA) in the field of Nanobiotechnology,
- implementing a scientific programme focused on twelve strategic research areas, considered as key areas for the future development of innovative nanobio-devices,
- constituting a durable and long lasting integration of the network partners resources.

Achievements of N2L after 4 years of operation are available at:

http://www.nano2life.org/download/major_achievements.pdf

Contact:

Patrick Boisseau, Nano2Life Coordinator

CEA-Léti

17 rue des martyrs

F-38054 GRENOBLE CEDEX 9

Tel: +33 4 38 78 38 54

Fax: +33 4 38 78 51 64

<http://www.nano2life.org>