EU-US Cooperation Issues

Giacomo Indiveri and Rodney Douglas

Institute of Neuroinformatics UZH | ETH Zurich

Zurich, January 2007





EU-US Cooperation

International co-operation is vital to meet global challenges



EC actively encourages the formation of broader international alliances: http://cordis.europa.eu/ist/international/usa.htm

EU-US Funding Opportunities

US Funding Agencies



NSF http://www.nsf.gov



NIH http://www.nih.gov



NASA http://www.nasa.gov



ONR http://www.onr.navy.mil



DARPA http://www.darpa.mil

International Funding Organizations



HFSP http://www.hfsp.org

EU-US Collaborative Research

Individual initiative

NSF Office of International Science & Engineering (OISE)

Ask you US partner to apply for international cooperation support, either with a **new** proposal, or to with **supplemental** support to an existing grant.

(see http://www.nsf.gov/div/index.jsp?div=OISE)

FP6 IST Research Programme

In FP6 IST and NSF outlined areas of mutual interest for which they jointly encouraged a transatlantic collaboration of research teams, supported under each programme.

The IST contact person is:

Erastos Filos, e-mail: erastos.filos@cec.eu.int

Coordinated bi-lateral programmes are possible

Past experience

The FP5 EU Competitive and Sustainable Growth (GROWTH) Programme entered into an agreement with the US NSF that enabled selected US researchers to join European consortia as participants in European Commission-funded activities, with the NSF providing support for US participants.

Many benefits...

One more valuable outcome of the collaboration has been the ability for leading scientists in the field of nanotechnology to meet for fruitful exchanges of news and views in a series of joint EC-NSF workshops organized on both sides of the Atlantic.

http://ec.europa.eu/research/industrial technologies/articles/article 355 en.html

The Telluride Neuromorphic Engineering Workshop



- Yearly event, started in 1994
- Lasts three full weeks in Telluride, Colorado. USA
- Transatlantic collaboration supported by international funding organizations, including the US NSF.
- Between 60 to 80 participants/year.
- Young investigators and well-established researchers work together on practical hands-on projects.
- World top experts share latest results, discuss on common strategies, define standards, etc.



Neuromorphic Engineering Workshop Value

Budget

The workshop has required relatively small budget (<\$150K) that was ensured by steady funding for long period (>10 years).

Value

It had (and has) an extremely high impact, with a total budget that is lower than the one of any average EU funded project.

Teaching impact

The workshop's teaching program has affected more than 300 people (both students and educators) from all corners of the world.

An FP7 IST-NSF bi-lateral agreement?

Possible catalytic event

A series of joint annual EU-US workshops similar to the very successful NSF "Telluride Neuromorphic Engineering Workshop".

Telluride Neuromorphic Engineering Workshop

A three week workshop, held in the summer, with emphasis on neuromorphic engineering hands-on projects.

International Neuromorphic Cognition Workshop

A two week workshop held in the winter/spring, emphasizing the cognitive aspect of neuromorphic systems

Future coordinated workshops

Planning

INI (http://www.ini.unizh.ch) and INE (http://www.ine-web.org) will hold an organizational self-funded meeting in April 2007 to discuss and plan these possible future workshops.

Support

Both workshops are planned to be privately funded, in collaboration with NSF, and hopefully with support from FET.

Why

As demonstrated by the GROWTH initiative, the coordination of two joint workshops, in Europe and in the United States is instrumental for promoting international collaborations, training young EU-US investigators, divulging the technology developed to the international research community at large, *etc.*

Contact information and feedback

Giacomo Indiveri

Institute of Neuroinformatics, UZH-ETH Zurich

e-mail:giacomo@ethz.ch