NEURON – a network of European funding organizations

There is little doubt that the maintenance and restoration of health are highly valued and fundamental to citizens in all countries. Among the many diseases affecting health, brain disorders are major causes for impaired quality of life. According to estimates by the World Health Organization, more than one billion people suffer from disorders of the central nervous system (WHO 2001). In Europe, approximately one-third of all burden of disease is caused by brain diseases (Olesen and Leonardi 2003). With increasing average life-expectancy, especially in highly industrialized countries, and the rapidly growing incidence of neurodegenerative diseases, this percentage will rise even further. Neuroscience research and its translation into diagnostic and therapeutic measures is therefore a high priority.

This fact is clearly recognized by health research policy makers and is reflected in the considerable amount of money allocated to the support of neurological and psychiatric research. However, while the cooperation level among research institutions in the various European countries appears satisfactory, clear deficiencies are present with regard to the coordination of respective research funding. Funding activities are fragmented and scattered at national and regional levels, and only few approaches have been made to phase them. Thus, the coordination of national and regional funding programs can improve the efficient use of high but still limited resources and increase their impact. Coordinated funding activities can avoid redundancy, fill gaps, and use synergies.

The field of neuroscience research in the global context is highly competitive. Combining the best research groups through coordinated or even joint-funding activities will increase the impact of European neuroscience research. Already existing transnational research collaborations can be strengthened, the formation of new interdisciplinary research consortia initiated and promoted, and the translation of results into health care improved. This will contribute to the creation of a "European Research Area" (ERA). The concept to create a Europe of knowledge and an "internal market" in research was launched at the European Council meeting, Lisbon, 2000, and has underpinned discussions of research policy issues in Europe ever since (see COM 2000, 2001; Sautter et al 2003).

Increased networking among European funding bodies is one way to meet the challenge of competition that Europe is facing in biomedical and health research, primarily from the USA and Japan. This idea is the starting point of NEURON (Network of European Funding on Neurological Research), a project initiated by funding agencies and research or health ministries from four countries, and funded by the European Union (EU) Commission within the ERA-Net scheme, a new funding instrument of the 6th Framework Program. Other funding bodies have joined the project so that currently ten EU member states and associated countries participate (Table 1). As endpoints of this process the opening of national programs for applicants from participating countries and joint calls for proposals are envisaged.

Some of the specific objectives of the NEURON network are to:

- Share information about existing national neuroscience research programs in Europe and their management. To analyze them and identify the most promising areas for joint initiatives.
- Achieve an added value for the considerable European investments into the area of neurological and psychiatric research by coordinating the existing but highly fragmented neuroscience research programs in Europe.
- Shape future national research programs and initiate the development of European priorities by providing a structured forum for health research policy makers,

Table I	Ministries and funding agencies participating in the
ERA-Net NEURON	

Germany	PT-DLR, Projekttraeger im Deutschen Zentrum fuer Luft- und Raumfahrt, coordinator of NEURON; Project Management Organization on behalf of the Federal Ministry of Education and Research (BMBF)
Luxemburg	FNR, Fonds National de la Recherche
Poland	MSRIT, Ministry of Scientific Research and Information
	Technology
Israel	CSO-MOH, Chief Scientist Office, Ministry of Health
Austria	FWF, The Austrian Science Fund
France	Inserm, Institute of Health and Medical Research
Sweden	SRC, Swedish Research Council
Finland	AKA, Academy of Finland
Italy	Ministry of Health
Great Britain	MRC, Medical Research Council

program managers, the scientific community, and patient organizations.

• Serve as an interface between society and science in Europe by promoting knowledge transfer from neuroscience research to patients suffering from brain disorders, and to increase public awareness for neuroscience research, health research policy, and translational research.

In NEURON as well as in other ERA-Nets, funding organizations exchange information about their work, their review procedures, and funding philosophies. This already is an achievement and will eventually lead to improvement of standards throughout partner countries. The ultimate goal of the ERA-Net scheme, however, is to initiate joint funding from national research budgets. Presently, these budgets are more or less strictly limited to national borders, and funding across borders is usually not possible. Concepts regarding how to overcome legal and administrative barriers need to be developed. Eventually, it will depend on the political will in each country whether the ambitious aims of NEURON and other ERA-Nets will materialize. There is no doubt that this would be beneficial to the scientific community and to the patients suffering from brain diseases.

Marlies Dorlöchter and Hella Lichtenberg

Project Management Organisation, German Aerospace Center, Bonn, Germany; email Marlies Dorlöchter marlies.dorloechter@dlr.de

References

- [COM] Commission of the European Communities. 2000. Towards a European area. Brussels: COM.
- [COM] Commission of the European Communities. 2001. First report on progress towards the European research and innovation area. Brussels: COM.
- Olesen J, Leonardi M. 2003. The burden of brain diseases in Europe. *Eur J Neurol*, 10:471–7.
- Sautter J, Wick R, Adlkofer F, et al. 2003. Research in the European Union. Lancet Neurol, 2:7002–6.
- [WHO] World Health Organization. 2001. Mental health: new understanding, new hope. Geneva: WHO.