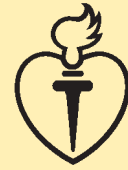


## Reconnaissance conducted by the Netherlands Heart Foundation



Important scientific fields of expertise or scientific developments are not or only partly explored within the existing regular subsidy channels. In those cases, extra stimuli could be needed. To profit fully from the advances in the world of research, it is important to understand the direction in which the world of research is developing. Since the end of the 1990s, the Netherlands Heart Foundation (NHF) has put this into concrete form by introducing periodical reconnaissance of the field of research. Based on interviews with a wide range of cardiovascular experts, the Research Department/Knowledge Centre of the Netherlands Heart Foundation looks for significant areas of development in the field of scientific research. This information obtained 'bottom-up' serves as the basis for 'top-down' stimulation. In this way, in the past few years various stimulation programmes have been established, especially oriented towards prevention and patient care with regard to cardiovascular diseases.

The reconnaissance conducted in 1999 has led to five stimulation programmes which have now been running for some time:

- \* NHF-Care Programme (2000-2005)
- \* NHF-CONCOR: National registry and DNA bank of adults with congenital heart disease in the Netherlands (2001-2004)
- \* NHF-NRG: Netherlands Research programme on weight Gain prevention (2001-2007)
- \* NHF-COACH: Coordinating study evaluating Outcomes of Advising and Counselling in Heart Failure (2002-2006)
- \* NHF-ALPHA-OMEGA trial: Dietary intervention study of the effect of low-dose supplementation with very-long-chain omega-3 polyunsaturated fatty acids and alpha-linolenic acid on coronary mortality in patients with a history of myocardial infarction (2002-2008)

Further information about these stimulation programmes can be found on

www.cavaris.nl (scientific content/targeted programs/prevention and patient care research program).

In 2002-2003 the Research Department/Knowledge Centre of the Netherlands Heart Foundation conducted more reconnaissance. About 40 cardiovascular researchers and cardiologists were interviewed. This round resulted in the identification of a number of important cardiovascular research fields for the near future. As a consequence of this reconnaissance, considerable effort is being made to get a number of new themes going:

- \* *Genetic epidemiology of cardiovascular diseases*: The preparation of genetic risk profiles using single nucleotide polymorphism profiling can become part of standard diagnostics in the future. Genetic epidemiological research is needed to establish whether this can be used to identify individuals and patients with a raised genetic risk and whether this will lead to more effective care and prevention. A committee established by the NHF is currently occupied with exploring this topic in greater detail by, for instance, organising an international expert meeting.
- \* *Noninvasive imaging and processing techniques useful for diagnostics, risk stratification, prevention and treatment of cardiovascular diseases*: The application of imaging and processing technology to clinical problems needs to be the focus of attention. Especially the noninvasive imaging techniques can contribute significantly to the identification of people at high risk and possibly better screening of presymptomatic individuals. This topic is currently being explored further by a committee of experts.
- \* *Cell therapy for the 'repair' of damaged hearts and vessels*: Cell therapeutic techniques seem to be very promising for the treatment of acute myocardial infarction and heart failure.

Considerable research is still required before clinical application can be considered. This topic has been singled out jointly by the NHF and the Interuniversity Cardiology Institute of the Netherlands (ICIN). A committee of experts has been established in the meantime and will submit a research proposal to the NHF and the ICIN in the beginning of 2005. After evaluation of this proposal by international referees, the research programme can be initiated.

- \* *Vascular neurology*: Cerebrovascular accident (CVA) is a large problem for the care domain. The acute care of CVA patients demands a great deal of attention. Improving our understanding of the pathophysiology of this form of vascular disorder is essential. This knowledge will provide opportunities for targeted interventions in acute CVA. To carry out these interventions, specially trained clinicians will be required. Currently, a committee is being set up to explore this topic. In 2005 stroke will be the annual theme of the NHF.
- \* *Pathophysiology of cardiac and vascular dysfunction in obesity and diabetes*: Obesity and its associated problems, such as diabetes mellitus, are expected to lead to a surge in cardiovascular disease. The causal mechanisms involved by which obesity leads to cardiovascular disease are still unknown. Also, the pathophysiological relation between diabetes mellitus and cardiovascular diseases requires further investigation. The exploration of this topic will be handled in consultation with the Dutch Diabetes Research Foundation.

We expect the above committees to report in the course of 2005. Based on that, the NHF will set up further activities on the respective themes. ■

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