

## Science and research strategy 2007 – 2012 for the Turku University Hospital's expert responsibility area

### Abstract:

The expert responsibility area of the Turku University Hospital is characterized by the intimacy and partnership of several hospitals, universities and colleges, as well as an extensive outpatient sector. The resulting international and competitive top research has also been financially taken advantage of, which has led to the birth of the strongest Finnish biofield cluster in the Turku region.

The science and research strategy enables focusing of resources to select disciplines of science and to such health challenges, where benefits can be attained in a short, intermediate and long term. This may imply specification of some areas of special expertise and founding centres for special expertise, but also admitting that within some areas the aim is not to attain other than clinical patient care of a central hospital level. The science and research strategy also defines the framework of a more extensive national and international collaboration, as well as leads to networking and collaboration with instances possessing mutually complementing knowledge. In the long term the University of Turku has a central position in the implementation of the science and research strategy as a prominent university in the biofield.

The science and research strategy of the expert responsibility area is based on an extensive analysis with its grounds in internal and external documentation. The analysis was complemented by extensive interviews with the strategic leadership and operative actors. The strategy aims at health benefits attainable through development of research activity and continuity, and at continuously decreasing overall costs within health care.

In the strategy work special spearhead research areas were specified for the expert responsibility area of the Turku University Hospital, they are as follows:

- Neoplastic diseases
- Cardiovascular and metabolic diseases
- Competence in and applications related to bioactive materials
- Functional neuroscience
- The PET centre independently, as well as competence and applications supporting the aforementioned fields

The spearhead areas are brought together by common goals into extensive consortiums, which construct their research plans in accordance with the principles of EU projects and based on a consortium agreement in writing. Participation by health care service system and nursing sciences is actively supported.

In addition to the spearhead areas research is supported and done within other, from a research point of view, strong areas:

- Infections (children and adults)
- Problems and challenges related to prematurity and development of small children
- Geriatrics and gerontology
- Rare (based on heredity/mutation) muscular, neural and neoplastic diseases
- Mental health and intoxicant research
- Clinical drug trials

- Research in the health care service system (including research in health and nursing sciences)

There should be such diversified competence within the research fields which through scientific means supports the treatment-related aims of the expert responsibility area.

In addition to focusing research and having multi-field research groups, one also has to leave space for seizing emerging opportunities and challenges taking advantage of individual innovativity, drive and risk taking, in order to quickly create something new.

One has to improve the level of how interesting and rewarding the scientific work is perceived among the researchers. This can be implemented through allocation of time and funds, as well as incentives related to career development and measures promoting the visibility of the level of influence of the scientific work.

The Hospital District of Southwest Finland and the University of Turku jointly establish how graduate schools can be exploited in supporting thesis projects of such physicians who are doing clinical work and how research can be made more interesting through development of incentives, for instance through intensifying the collaboration between the universities and colleges in the region in the implementation of research education and leadership training.

Postdoctoral researchers and research are in the long term in a key role, so that the survival of old research groups and the continuity of their innovative work are ensured. Thus the prerequisites for formation of new research groups are also created.

The prerequisite for the success of a research is the gathering of a sufficient critical mass in relation to each focal area. Research is risk taking and failures are possible, and one has to be able to take advantage of them as important learning experiences.

The science and research strategy proposes a barometer consisting of three factors to be the barometer for the scientific research in the overall strategy of the Hospital District of Southwest Finland.

- Amount of science and research funding
- Significance of the research projects' results
- Scientific result level of the research

Continuity of the research activities and ensuring funding, as well as broadening the financial base in cooperation with various actors, are central strategic areas.

Overcoming challenges requires above all else "room" for research as well as demand for research activities. This calls for collaboration, financial support also from those organizations making use of the research, as well as an investment of time and a mental investment from the researchers. The research develops into more professional in the consortiums and they also improve the process of the financial base becoming more international.

One should actively seek cooperation with Tekes, the Finnish Funding Association for Technology and Innovation, and with the industry. In addition to focusing research and having multi-field research groups one also has to leave space for risk taking, individual innovativity and drive, in order to quickly create something new, and also to meet the long term challenges of the future.