

2003-05-19  
Professor Kent Lundholm  
Department of Surgery  
Sahlgrenska University Hospital  
Göteborg

### **Scientific report, WP 3.1**

Professor Kent Lundholm and Nils Conradi received a budget of 450 000 SEK for an application on Swedish Biobanks and IT-logistics in the Swedish health care system. We were obliged to evaluate and specify in details how a national wide IT-net work should be designed and work to fulfil future demands for both research at Swedish universities as well as routine and developmental work in Swedish hospitals. Such a system, with associated networks, should be able to integrate administrative information, patient data and should also be a tool in rapid search for samples of specified biological characteristics and conditions among present and future laboratories and biobanks in Sweden. Our inventory should take into account all the presently different IT-systems among larger biobanks in departments and laboratories at Uppsala-, Umeå-, Karolinska-, Huddinge-, Sahlgrenska- and Malmö Allmänna Hospital. It was emphasized in our instructions that it should be possible and a preference to store the same kind of information in most standard records at different laboratories.

For the purpose, we have consulted a professional IT company with long experience to resolve and propose IT-solutions for hospital care as well as scientific work, for specification and inventory according to the above mentioned instructions. In their work they have considered a variety of technical difficulties in connections with universities, hospitals and laboratories working with different data systems. It is planned and assumed that future communication among system users should be run over the Swedish hospital network (SJU-net) and probably the university network (SUNET) The IT-company has a good knowledge about specifications in a variety of currently working lab. systems, for example in different pathological laboratories. Therefore, our report contains both technical specifications and a suggestion for an efficient and opened system working across SJU-net. Our system takes into account the possibility for both large and small research groups to develop and design their own data sheets, formulations and algorithms in research. It should also be a possibility for any authorized user to search in all connected biobanks across the whole country. The critical issue about secrecy and legal aspects to handle sensitive information has also been considered in our evaluation. In our description we have proposed the use and future development of a presently available administrative log-in system, which can handle authorisation and select appropriate user levels for any PC connected user to a future network.

Our work has been presented in a written detailed description including both text and related graphs to describe the whole integrated system to an extent that is presently either available, in part available, or that should be necessary to develop. Moreover, preliminary estimates for the cost of development of a whole national wide IT-application, at all Swedish University hospitals for use in biobank applications has also been considered, although such a cost estimation should only be regarded as preliminary and as guidelines.

2003-05-19  
Professor Kent Lundholm

**Budget for WP 2.1**

|  |         |
|--|---------|
| Cost for the network specification and including our hard ware demands | 174.749 |
|--|---------|

Personal working time:

|  |        |
|--|--------|
| Professor K. Lundholm, secr A. Olsson, secr. B Tylén | 50.000 |
|--|--------|

|                  |        |
|------------------|--------|
| Cost for travels | 12.441 |
|------------------|--------|

|      |       |
|------|-------|
| Moms | 1.082 |
|------|-------|

|                |                |
|----------------|----------------|
| <b>Totally</b> | <b>238.272</b> |
|----------------|----------------|