

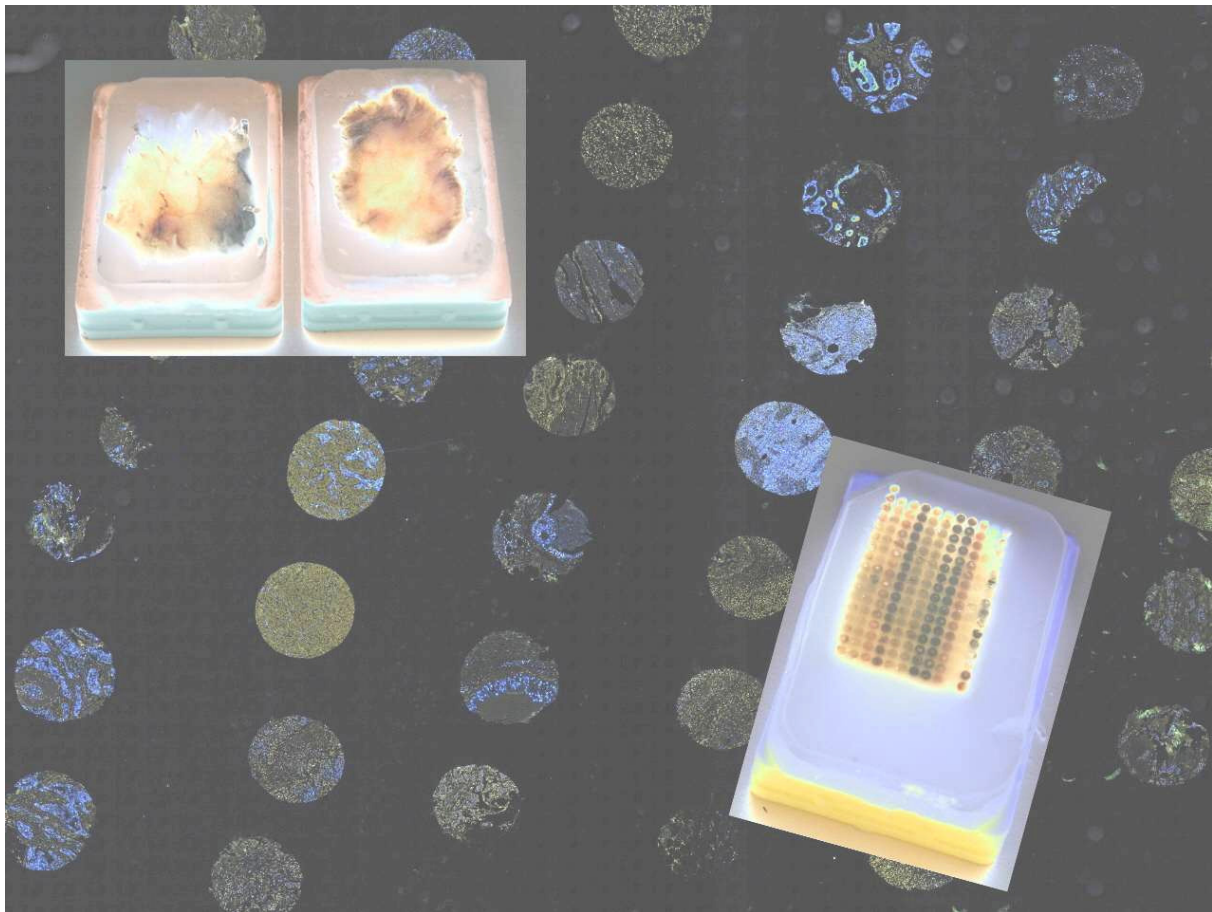
National Tissue Microarray Center

The National Biobanking Program- WP5.3

Annual report 2006

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The Swedish National Biobanking Program

Background and specific aims

Biobank and registry networking opens new possibilities for assessment of the effect of treatment and for identifying new molecular markers useful for selection of optimal treatment. Population-based biobanks with samples taken many years ago are available in Sweden including material from many randomized treatment trials.

A necessary refinement of the existing biobanks to enable large-scale and effective assessment of the presence of markers under identical staining conditions that do not use up valuable materials is to construct tissue arrays of well-characterized patient cohorts.

In order to preserve these valuable materials we have within the **National Tissue Micro Array Center** started the construction of high quality tissue arrays including thousands of specific tumors as well as material from other diseases. Clinical information has also been gathered and we will be able to offer the research community sets of large and high quality arrays linked to clinical information.

Achievements during 2006 and status of the center

- The TMA center is formed and fully functional with several successfully arranged arrays.
- Technology collaboration with the TMA inventor Juha Kononen (Beecher Inc.), Fredrik Pontén (Human Proteome Resource, Uppsala), and Slidepath, (Dublin, Ireland).
- Center open as facility for array constructions of external materials.
- An automatic Tissue Array Robot in use.
- Several large breast cancer arrays (<3000 patients) with clinical data completed, including unique randomized treatment trials (tamoxifen).
- All breast cancer cases in the Malmö Diet and Cancer cohort arrayed and in use.
- Several other arrays completed: prostate cancer, heart, colorectal cancer, AML, ALL
- Around 25 publications with associations to the center.
- Discovery of markers that can predict if a breast cancer will respond to tamoxifen treatment or not.
- 20 research projects using arrays from the center (11 different universities).
- A yearly budget of 1 500 000 Skr.
- Prices for construction of external TMAs. Construction of a triple-array of 100 breast cancer samples: 10 000 Skr.

Future perspectives

1. To expand and consolidate the national tissue microarray (TMA) center at UMAS.
2. To concentrate on the construction of high quality TMAs based on top biobanks available within the Nordic countries and link the TMAs with clinical and epidemiological data.
3. To install state-of-the-art data base management of TMA-data linked to semi-automatic evaluation of TMA (EU-project and collaboration with Slidepath). This will increase the quality of the evaluations and secure data as well offer Internet and server based validation of tissue microarrays.
4. To expand the collaboration with HPR.

Budget considerations - 2006

The TMA center has been funded from several sources during 2006: Apart from the National Biobanking Program (Swegene/Wallenberg consortium north) also by Lund University; Laboratory Medicine-UMAS as well as through external collaborations and fees. An important contributor to the center has been the HPR-project in Uppsala which now officially has been linked to the TMA center and several projects are coordinated together.

Altogether the budget for the TMA center 2006 has been approximately 1.200 000 Skr. 203 000 has been obtained from the National Biobanking Program.

An accounting summary in Swedish follows.

The Swedish National Biobanking Program

Sammanställning över rekvirerade medel från SWEGENE (Nationella Biobanksprogrammet) för National Tissue Array Center

Laboratoriematerial och förbrukningsartiklar inköpta 2005	83 230,90 kr
Lön för BMA Elise Nilsson del av augusti 2005	12 356,36 kr
Del av lön för BMA Elise Nilsson januari - augusti 2006	43 241,69 kr
Lön för BMA Elise Nilsson 1 september - 15 oktober 2006	58 105,31 kr
Lön för sekreterare, Kristin Lindell 17,36 timmar	3 876,48 kr
Overhead	2 214,15 kr
Summa som rekvirerats från Swegene 2006	203 024,89 kr
Rekvirerade medel 2007:	
Lön för BMA Elise Nilsson 16 oktober 2006-31 januari 2007	133 000,00 kr
Summa som rekvirerats från Swegene 2007	133 000,00 kr
Finansiering av lönekostnader från Lunds Universitet 2005	150 000,00 kr
Finansiering av lönekostnader från Lunds Universitet 2006	
Del av lön för BMA Elise Nilsson januari - augusti 2006	268 000,00 kr
Fortsatt satsning på Swegene-centra vid Lunds Universitet 400.000 SEK/år under perioden sept 2006 - dec 2009	
Utbetalt dec 2006	133 000,00 kr
HPR projektet maj-dec 2006	600 000,00 kr