## Concluding Remarks: "Biobanking for Cancer Research: Rules and Roles," November 2010, Bari, Italy

Peter Riegman,<sup>1</sup> Maria Grazia Daidone,<sup>2</sup> and Angelo Paradiso<sup>3</sup>

The 2-day meeting in Bari welcomed representatives from several European and extra-European cancer biobanks. Several aspects worthy of note concerning the topic were debated.

First of all, the meeting visibly showed the large diversity of biobanks currently involved in cancer research. The impact of these biobanks on research is absolutely evident, although there is much room for improvement. One example needing desperate improvements is sample and data exchangeability on networking hospital-integrated biobanks, to enable their multicenter study opportunities with high statistically significant outcome, which are instrumental to improve their contribution to the innovation of cancer care. Among the speakers, experts working on the leading edge of biobanking and biobanking networks were invited. The meeting disseminated the role of biobank managers and the rules that are being applied in the different fields of biobanking. In addition, it was underlined that all the fields give their outstanding contribution to cancer research. Moreover, it was clearly shown that it is impossible to adhere to one rule or role that fits all. This is reflected also in the type of materials collected, ranging from residual tissues to xenografts and blood samples used as input not only for genomics but also for transcriptomics, proteomics, and their underlying fields of expertise.

Reports on the latest developments regarding the activities of Biobanking and Biomolecular Resources Research Infrastructure (BBMRI), one of the first European research infrastructure projects funded by the European Commission (EC), European Organization for Research and Treatment of Cancer (EORTC), Organisation of European Cancer Institutes (OECI), Rete Italiana Biobanche Oncologiche (RIBBO), Rete Oncologica Lombarda (ROL), Spanish Network, and OECI-TuBa-Frost Networks on cancer biobanking field were presented. The international networks rely on the catalogs and descriptions of biobanks, whereas the national and local ones can rely on integration of the sample databases. The clinical trial-related collections, like those organized at the EORTC, need to be set up in a customized fashion depending on the explicit demands of the specific translational study design.

Quality issues were presented with the latest on how to improve sample exchangeability not only looking for quality assurance and quality control on the inside of the biobank, but also looking for external quality assessment and on how to get the most from existing diagnostic formalin fixed and paraffin embedded sample collections in pathology departments. Informatics, as part of the biobank, was not forgotten and comprised the difficulties of annotation encountered when networking biobanks.

Ethics and regulation is a very important issue in biobanking human samples for medical research and therefore was represented in the course. Ethics and regulation determine what needs to be done to be able to use a sample for medical research and to exchange such a sample with other institutes. In this way, it plays a very important role in sample exchangeability. This is not always an easy task because of the diversity in regulations and laws ranging from country to country and mostly ranging from the type of collection in the biobank. In addition, there are diverging regulations applied for children or those who are unable to give consent because of an impediment.

Young researchers had the opportunity to show their work by means of a display of over 20 posters. The two best posters from the selection were awarded. The winners were "The Biobank of the Istituto Clinico Humanitas: Development of a Network for Sample Collection" by Daniela Pistillo from the Istituto Clinico Humanitas–IRCCS, Rozzano, Milan and "Biobank Network to Improve Cooperation and Management of Clinical Samples for Cancer Research; The Example of the Valencia Community" by Antonio Lopez-Guerrero from the Laboratory of Molecular Biology, Fundacion Instituto Valenciano de Oncología, Valencia, Spain.

Over 100 doctors and researchers (Fig. 1) from Europe and the Northern Mediterranean countries engaged in a discussion on the most interesting scientific and technical innovations in this area. Fourteen OECI centers were present, represented by 35 people, and 27 people from 10 non-OECI centers also attended.

All in all, the entire course gave a comprehensive overview of the roles and rules in biobanking for cancer research, creating the opportunity for the audience to find correspondence between their biobank organization and the current international view. Ten presentations from the abstracts were chosen to be published in this special issue of *Biopreservation and Biobanking*. I hope these selected articles give you the opportunity to get hold of the right impression and the spirit of the course that was held in Bari, Italy.

<sup>&</sup>lt;sup>1</sup>Department of Pathology, Erasmus MC Tissue Bank, Rotterdam, The Netherlands.

<sup>&</sup>lt;sup>2</sup>Fondazione IRCCS Ist, Nationale dei Tumori, Milano, Italy.

<sup>&</sup>lt;sup>3</sup>Istituto Tumori G Paolo II, National Cancer Center, Bari, Italy.



FIG. 1. Meeting participants.