

## NCRI 2013

### The Issues with Tissues

I have now returned from this year's excellent NCRI Conference. There are always difficult decisions about which sessions to attend and invariably I want to be in several places at once but there was one session that really was an absolute 'must' for me. That was the session hosted by Mairead MacKenzie of Independent Cancer Patients' Voice (ICPV) concerning tissue donation and titled 'The Issues with Tissues'. This session explored issues surrounding donation, collection and use of human tissue in cancer research.

The session opened with Mairead setting out the objectives and outlining how we would achieve that. Then it was over to Mariam Jamal-Hanjani who made a brilliant presentation of the rationale for the collection of tissue, picking up on the issues of heterogeneity and disease evolution that had featured in an earlier plenary lecture. The sparkle continued as she passed the baton over to Matthew Krebs, who took us into the collection of blood samples and analysis of circulating tumour cells.

The next section of the session looked at the issue of consent, with Helen Bulbeck outlining the work of Brainstrust and Hilary Stobart's powerful presentation on the role, rewards and challenges of the volunteers at Nottingham Health Science Biobank. The NHSB volunteers are part of an innovative consent pathway that clearly is bearing fruit in this important area of consent. (Hilary also featured in NHSB's poster on the use of volunteers.)

In the third section Jacqueline Hall took us through the challenges and complexities arising in the pan-European environment. I was particularly struck by her neat summing up of what was required to move forward as "simple and clear rules, rigorously applied".

The session then moved into a good question & answer and discussion session chaired by Bridget Wilkins.

ICPV are working, in collaboration with other groups, individuals and organisations, on the production of a public guide to tissue donation and, as a preliminary step, at the end of the session there were questionnaires distributed covering aspects of tissue donation. These questionnaires have been devised by a small group of young pathologists.

#### More Conference Highlights

It was certainly a very full few days but not surprisingly, some sessions grabbed me more than others. So here is a little bit more about sessions that were, for me at least, the highlights. I'm sure other attendees would have a different list, but that is all part of a wide ranging programme.

With a subject matter as wide as cancer research it is inevitable that such a conference will have many strands. One such strand working its way through the conference was that of tumour heterogeneity. Nowhere was this complex subject more powerfully yet accessibly expressed than in the plenary lecture given by Charles Swanton. Most solid tumours display considerable diversity and natural selection throughout their history. The lecture drew on the work of Richard Goldschmidt and Stephen Jay Gould to illustrate the complexities of chromosomal instability and genome doubling as macromutational events giving rise to large evolutionary leaps.

Heterogeneity, both inter and intra tumour, underlines the importance of researchers having access to good quality tissue samples throughout all stages of disease.

Other sessions that made an impression explored the issue of cancer predisposition genes. Douglas Easton spoke about this in relation to breast cancer, building on a session of his I attended at a previous conference. Around 100 common genetic variants have been found to be associated with breast cancer risk and they can combine multiplicatively. Some convey an increased risk (though nowhere near that of the BRCA mutations), while others are associated with lower than population risk.

Nazneen Rahman's lecture (which closed the conference) started from the point that cancer predisposition genes have now been found for over 40 different cancers. She spoke about the move from the linkage research, which led to the BRCA 1 & 2 success, to the candidate gene approach now bearing fruit. She also pointed out the need for clinical guidelines covering the issue of incidental findings as gene testing becomes more widely available.

Away from these strands I attended an excellent session hosted by Alistair Thompson on developments in breast cancer radiotherapy. This looked at such topics as fractionation, access to intensity modulated radiotherapy and reducing cardiac risk using various techniques.

I went to a proffered paper session on clinical trials, in which 8 presenters each had a 10 minute slot in which to present their findings or ongoing work. These included the Pomi-T Study that found polyphenol rich foods to have a favourable effect on the rise of PSA in prostate cancer (so - meals of broccoli in turmeric sauce, followed by pomegranates and washed down with green tea!). Another trial, presented by Dan Rea, was the now well publicised aTTom trial which has concluded that 10 years of tamoxifen produces further benefit over the (previously) standard 5 years, with the increased benefits being seen after 7 years for recurrence and 10 years for mortality. The differences are regardless of nodal status.

Dan Rea was back for the Dragons' Den session in which researchers presented to members of the Consumer Liaison Group and other patient advocates. This time he was presenting the LORIS trial, which is due to open shortly. This trial will investigate whether women with low risk DCIS can safely avoid surgery. Trial participants will be randomised to standard treatment or active monitoring. For the QoL aspect there will be questionnaires for the first 5 years.

**Elizabeth Benns, November 2013**