



International HLA
and Immunogenetics
Workshop



26th European Immunogenetics
and Histocompatibility
Conference



23rd British Society
of Histocompatibility and
Immunogenetics Conference

Liverpool
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Workshop Projects

- New Frontiers

Next-generation HLA sequencing

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HLA genotyping

- Highest resolution HLA typing is obtained by Sanger-based DNA sequencing
- Sanger-based DNA sequencing results in ambiguous typings due to;
 1. Phase (cis/trans) ambiguity – 2 alleles are sequenced together
 2. Incomplete sequence – variations outside the region sequenced
- Ambiguities can be resolved by Sanger sequencing
 - BUT.....costly, time-consuming and laborious

Aims of the 16th IHWS Project

- To identify and compare the different “Next Generation” approaches (small and large amplicon approaches, capture approaches)
- To compare “Next Generation” technologies to current Sanger HLA Sequence-based typing methods or alternative methods.
- To identify the “pros and cons” of utilising “Next Generation” technologies for HLA typing.

Participation requirements

- Participants will be asked to;
 1. Complete a questionnaire prior to the workshop
 2. Present and discuss their own experiences with Next Generation HLA Sequencing at the workshop.
- Discussion points may include;
 1. Accuracy
 2. Cis/trans ambiguity resolution
 3. Coverage requirements for accurate results
 4. Bioinformatics
 5. Cost
 6. Turnaround times/Workflow
 7. Sequence variation

Time frame:

- 2011 Oct: Close registration
- 2011 Nov: Send out the questionnaire for completion by participants
- 2012 Jan: Submit questionnaire to DCI
- 2012-16th IHIW: Participants to discuss laboratory experiences.

Costs:

- Nil

For further information:

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