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Dear Colleague

I apologise for the delay with the preparation of the synopsis of the meeting held in The Hague on 6 October 1989.

As you will see there are three meetings planned to be held in the UK in the early part of 1990 and it is hoped that we can arrange dates such that it is possible to attend all of these in one trip.

Details of the Forensic Statistics conference are attached and you will be informed of dates, venues and costs of the EDNAP and TREVI meetings as soon as arrangements are finalised.

Prof. Brinkmann, Dr Kloosterman and I will meet on 9 December 1989 to discuss the outstanding problems raised at our last EDNAP meeting and we will also prepare topics for the 1990 meeting.

We all hope that you will continue to support this initiative for harmonisation of DNA profiling in Europe. If you have any colleagues in other laboratories who are already performing DNA profiling or preparing to use this technology, could you please inform them of the EDNAP work.

With regards and best wishes for successful profiling.

P D Martin

P D Martin
(on behalf of EDNAP Group)

Enc

Meeting of

European DNA Profiling (EDNAP) Group

6th October 1989 - The Hague, Holland

Chairman: Dr A Kloosterman

Summary of Meeting

Dr R Fimmers (Bonn) gave a formal lecture on the subject of Biostatistics, in which he pointed out some of the difficulties of calculating allele frequencies from single locus probing.

This theme continued throughout the meeting and although many of the now familiar problems were put to the meeting no practical solutions were advanced.

Dr P Schneider (Mainz) and Dr D Werrett (Aldermaston) gave their respective reports on the statistical treatments of the results obtained from the inter-laboratory exercise in which samples were restricted with Hinf 1 and probed with YNH 24.

The exercise had not been completed by all participants and therefore the results/assessments will be circulated when the study is finished.

Dr Schneider made several recommendations which were discussed by the group and the following were accepted:-

1. Procedure for isolating DNA

   Any method which has been shown to give good results is acceptable, eg. salt or chloroform/phenol.

2. Measurement of DNA concentration

   Extracted DNA should be measured by fluorimetry after solubilisation overnight at 65°C. The quality of the extract should be checked on a mini-gel with a XHO1 digest of λ DNA as a control.

3. Shipment

   Samples should be sent inter-laboratory as ethanol precipitates in a small volume of ethanol.

4. Enzyme digestion

   The preparation should be monitored before and after digestion using a mini-gel.

5. DNA Apparatus

The support medium (gel) should be 1% Agarose cast at 45°C to avoid distortion of the gel container.

6. Buffer System

This can be either Tris/Acetate/EDTA or Tris/Borate/EDTA.

7. 3 Marker Lanes should be present on each gel.

[It was also suggested that there should be a control sample with each run and Dr Kloosterman proposed that this should be selected as part of an inter-laboratory exercise.]

Dr Werrett followed his presentation by posing 4 pertinent questions which should be discussed at the next meeting.

1. Is it possible to compare the results from one laboratory with those from another?

2. Is it possible to combine data-bases from various laboratories for population frequencies?

3. Should laboratories be accredited for their competence to perform DNA profiling?

4. What are the parameters necessary for the interpretation of autoradiographs?

Prof. B Brinkmann (Munster) outlined his thoughts on the distortion of frequency data obtained from "binning" due to the greater or lesser influence of some alleles. Although there was some discussion, no conclusion was reached.

Dr Kloosterman (Rijswijk) described the use of immortal cell-lines for producing control material which could be used by all laboratories. It was agreed that this is a worthwhile consideration and could become the subject of an inter-laboratory exercise to be arranged in the future.

Mr B Parkin (London) made a short presentation regarding the non-isotopic probes which are currently being developed by Cellmark Diagnostics. It was thought that they could provide the necessary reagents for those laboratories who could not obtain a licence to use radio-labels.

Prof. Brinkmann then chaired a meeting of the original members of EDNAP.

The aim of this group was restated:

"European integration using common technology with reference to stain grouping."

All members were willing to continue with this aim. The members were divided on the issue of expansion of meetings to embrace representatives of all of the European countries. Some wished to keep meetings small and informal as they considered this a far easier mechanism for making decisions with respect to changes in DNA profiling. Others felt that if laboratories were not represented to offer their points of view they would not wish to be influenced by this group. The problems concerning minimum standards, quality assurance, use of protocols and the general interchange of information were all debated but no conclusions were reached.

Dr Kloosterman suggested the election of an executive committee and this was followed by a proposal by Prof. Brinkmann that a group of 3 people should meet to discuss the problems and set an agenda for the next meeting. The trio would consist of Brinkmann, Kloosterman and Martin (London) as the secretary. There were no dissenters.

Their brief was not clear but, in conversations following the meeting, it appeared that this group would not have executive status, but rather act as a steering group.

Mr Emerson (Aldermaston), on behalf of the UK, has agreed to host the next meeting of EDNAP to be held in April 1990 (details will be made available at a later date). He also informed the meeting that a conference on DNA profiling is being planned for April 1990 under the patronage of TREVI. This will be a useful adjunct to EDNAP and more information will be forthcoming.

Finally it was agreed that MS43A should be the second probe adopted by EDNAP for all participating laboratories. This means that we now have a consensus to use Hinf 1 as the restriction enzyme and YNH 24 and MS43A as our core probes and the Amersham ^{35}S control markers.