

Publishable Executive Summary

Management

During the past reporting period the SAFE Network of Excellence have engaged a number of measures to encourage greater participation in the project by non-Network Steering Committee partners (partners), and have reacted positively to the previous reviewers concerns. This has resulted in significant changes to the management structure including the recruitment of a new Project Manager, Mr Barry Yau in September 2005, and election of a new Chair of the Network Steering Committee (NSC), Professor Neil Avent (Partner 3) in October 2005.

Changes to the project since this period have included the discontinuation of the *Special Allocation Fund*, and replacement with a transparent process for allocation of project resources to all partners. This process has recently included the call for *Activity bids* to appropriate Workpackage leaders, who are proactively engaging SAFE partners in the writing and allocation of resources for the Joint Programme of Activities M25 to 42. This process has ensured a more even spread of the project resources with the current request for funding having 39% of funds allocated to the NSC (including Management), as compared to JPA M13 to 30 where 42% (including Management) of funds were allocated. Throughout 2006 these improvements will continue, including the provision of a robust on-line reporting system, substantial preliminary notice of SAFE meetings and workshops and better means to improve communication within the consortium. Website development is considered critical to streamlining the management of the project. Many of these improvements were in response to a workshop held in February 2006 by EC FP6 expert consultancies Bluebell Research and Yellow Research.

Integration and Spreading of Excellence

These activities have now become the main priority for the Network. The SAFE network of excellence has made significant advances in the past 12 months to improve these activities. This has included the establishment of an Integration Board and Spreading of Excellence Board, comprising a nominee of each Workpackage leader, and are driving exemplars of these activities forward.

The Integration Board is led by Professor Barbara Pertl (partner 8a) and the Spreading of Excellence Board by Dr Lyn Chitty (partner 41a). These Boards operate independently of the Network Steering Committee (NSC); no NSC members are permitted to serve on these Boards. A major development of the Integration activities in 2005 was the launching of the SAFE PhD bursary scheme, and 16 of these have been awarded and all have now commenced. All but one were allocated to non-NSC members.

The first SAFE PhD workshop, a major integrating activity will be held at Zandvoort, The Netherlands on May 10-11th 2006. The prime achievement in 2005 of the Spreading of Excellence Board is the significant improvement of the consortium's website, (www.safenoe.org) which is managed by Waypoint Systems (Partner 56).

The improvement can be gauged by the increased number of weekly visits this site records – October 2005 total 2,554 (daily 82); February 2006 total 16,253 (daily 580).

Scientific outputs

Outputs from SAFE include the definition of robust, standardised maternal plasma based tests for fetal blood group *RHD* genotyping and sexing. A significant number of workshops were held in year 2 considering standardisation (May), implementation of gene chip technology (February), pre-term labour (June), neonatal screening (May), fetal sexing (July), application of aptamer technology (October), application of free fetal DNA in maternal plasma (January), *RHD* genotyping from maternal plasma (March). All of these workshops have greatly contributed to the future scientific direction of the project. Many of these workshops have been organised under the auspices of Workpackage 4, which has been central in the implementation of new technology, and development of long-standing collaborations to ensure progression of the consortium beyond the current FP6 funding period.

The isolation and analysis of circulating fetal cells continues to be a topic generating considerable interest in the SAFE consortium (WP1), evident from the successful completion of SAF applications, as well as from the submission of numerous new activity bids. WP1 will interact closely with WP2, as well as with WP4 (workshop).

Management of the scientific outputs from Workpackage 3 has included the reorientation of this large Workpackage into two pools, WP3A Free fetal DNA and WP3B Post Genomics Technologies in NIPD. There has been considerable expansion of activity in proteomics especially, and this will continue as original research may provide a series of new generation assays for assessment of pregnancy complications including aneuploidy, preeclampsia, preterm labour and Intrauterine growth restriction. As SAFE outputs are accruing, a robust technology and exploitation plan will be constructed during the next reporting period to ensure that SAFE intellectual property is protected, and has a clear route to technology transfer and the market.

Socioeconomic Outputs

SAFE continues to be a broad church of activity including the assessment of the developing health technology on economic, ethical and psychological grounds. The consortium continues to consider and debate these issues on a collective basis. SAFE remains committed to ensuring the proper implementation of NIPD technology which is bound by EU and National legislation to ensure sex selection is only performed where clinically necessary and could risk the life of the infant. SAFE also is committed to cost-effective implementation of NIPD technology, ensuring that policy makers in different countries are provided with information required to enable early decision-making.