We hope this newsletter finds you well. It has been another busy year in the LBC1921 Study, but let us begin by wishing you all the very best for Christmas and the New Year. We have produced this update to keep you informed about what has been happening with the study throughout 2005, and to give you some news about our future plans which we hope will be of interest to you.

Princess Alexandra Eye Pavilion
As you know, the aim of the study is to find out how people maintain their mental abilities into old age. To continue investigating this, we asked a number of you to visit us at the Princess Alexandra Eye Pavilion over the past 2 years. In total, Alison Pattie and Alan Gow saw over 320 of you, and we would like to thank everyone who came along. This ongoing follow-up is very important as it allows us to see how well you are doing now. It was extremely encouraging that so many of you were willing and able to come along, and we are very thankful for your continued enthusiasm and cooperation.

We are starting to look at the information collected and would hope to report some exciting results over the coming year. In the meantime, those of you who took part may remember that we took some pictures of your face. On the next page, you can see what happens with these. The 2 images shown are called composites. What this means is that each image is not
of any single individual, but rather they are made by merging the photographs of a number of individuals. In the images above, the photographs of 8 different people have been combined. We’re doing this because researchers believe that the symmetry of a person’s face may be an outward indicator of their general health. When the analysis of all of the images is completed, we will be able to look at this idea in greater detail.

You may also remember we used another special camera to take a retinal photograph (a picture of the back of your eye). A retinal photograph is shown below.

In this picture, the individual blood vessels are visible as dark lines spreading out from a central point. We are now beginning to examine whether the pattern of these blood vessels bears any relation to how well you did on the thinking and memory tests. We hope to let you know about this analysis and more in due course.

On the next few pages we’ve summarised several of the latest findings from the LBC1921 Study, which we hope are of interest.

**Latest findings**
The past year has once again been very productive in terms of publishing results from the information collected since the study began. As in previous years, we’ve provided a short summary of a selection of these at the end of this newsletter. One paper which generated quite a bit of media interest showed that your life satisfaction at age 80 was not related to how well you did on the Moray House Test, either at age 11 or about age 80. This finding was reported by a number of media sources, including the BBC and New Scientist, both in the UK and internationally. To give you a flavour of this coverage, we have included a piece which appeared in the Edinburgh Evening News.

Please remember, it is only because of your continued support of, and participation in, the study that has made all of these publications possible. Therefore, if you have questions related to any of these, or the study in general, please do not hesitate to get in touch.
2006 and beyond
We are beginning to think about what the next stage of the LBC1921 Study will involve, and hope that we will be able to invite you back to see us again soon. You do not need to do anything about this just yet, but over the coming year, Alison will contact you to let you know more about this follow-up. It would be a pleasure to be able to welcome you back once more.

Many thanks again
From all of the team, may we again extend our appreciation for your support of the study. It has been great to catch up with so many of you over the last few years, and we look forward to speaking with you again soon and throughout 2006.

Merry Christmas, and best wishes for a happy New Year.

Yours sincerely,
Professor Ian J. Deary, Dr John M. Starr & Professor Lawrence J. Whalley, Study Directors
Mrs Alison Pattie, Research Associate
Mr Alan Gow, PhD Research Student
Dr Martha Whiteman, Research Fellow

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Below is the Edinburgh Evening News article.

Evening News
Fri 15 Jul 2005

Older and wiser, but no guarantee that you'll be happier

BEING intelligent does not guarantee happiness in old age, a study showed today. Researchers looked at 550 volunteers born in Scotland in 1921 who had their IQs tested when they were 11 and then again at 80 years old. Participants also completed a questionnaire designed to assess their satisfaction with life.

Satisfaction scores were both unrelated to IQ either in childhood or old age, or changes in mental ability throughout life. The researchers, led by Professor Ian Deary from the University of Edinburgh, wrote in the British Medical Journal: “The lack of a cognition-life satisfaction relation could be due to the fact that higher ability is equally likely to lead to positives, as well as negative outcomes.”
Research publications
The LBC1921 and related studies continue to contribute to major scientific journals. Listed below are brief summaries of just 5 of these, all from 2005. Please get in touch with us if you would like a copy of any of these articles.


This paper showed that individuals who possessed a certain form of the Nicastrin gene had higher mental test scores at age 11, however, this was not related to changes in mental ability across the lifespan.


As mentioned earlier in the newsletter, life satisfaction at age 80 was not found to be related to mental ability at age 11 or about age 80, or the change across this time.


The results in this paper suggest that differences in the COMT gene are related to later life mental ability and particular aspects of personality.


Lower levels of vitamin B12 were associated with greater change in mental ability across the lifespan, however, serum folate levels were not related to later life ability.


In this paper, variations in the DISC1 gene were found to affect later life mental ability in women, but not in men.

*Lothian Birth Cohort 1921 Study - Christmas 2005*