

## **The Avon Longitudinal Study of Parents and Children (ALSPAC) management and policy**

### **Introduction**

This document summarises the management and policy of the Avon Longitudinal Study of Parents and Children (ALSPAC). The Avon Longitudinal Study of Parents and Children (ALSPAC) is a prospective study. References describing the resource are included in Appendix 1. Briefly, pregnant women living in one of three Bristol-based health districts in the former County of Avon with an expected delivery date between April 1991 and December 1992 were eligible to be enrolled in the study. Around 14,000 pregnant women were initially recruited. Detailed information has been collected using self-administered questionnaires, data extraction from medical notes, linkage to routine information systems and at research clinics. Ethical approval for the study was obtained from the ALSPAC Ethics and Law Committee (IRB00003312) and Local Research Ethics Committees.

### **Management**

Professor George Davey Smith is the Scientific Director of the study. The day-to-day running of the study is the responsibility of the ALSPAC executive. The executive currently comprises George Davey Smith (Scientific Director); John Henderson (co-Director); Debbie Lawlor (co-Director); John Macleod (co-Director); Lynn Molloy (Executive Director); Andy Ness (co-Director) and Sue Ring (Head of ALSPAC laboratories). The executive usually meets weekly to consider proposals and papers. The terms of reference of the ALSPAC Executive are contained in Appendix 2.

If you would like the executive to approve a paper for submission or to consider a proposal for use of existing data or collection of new data please follow the guidance below and send through your paper or proposal to the executive e-mail address: [alspac-exec@bris.ac.uk](mailto:alspac-exec@bris.ac.uk).

An independent steering group (ISG) oversees the running of the resource. Professor Kay-Tee Khaw chairs the group and the group meets annually.

### **Sharing data with researchers**

#### **General issues**

ALSPAC is run as resource for the research community. At the present time the resource is set up as a supported access resource rather than as an open access resource. However we anticipate that over the next few years more of the resource will become available via open access. The following sections describe the information available on the resource, the process of sharing different types of data and costs of sharing data.

#### **Information on the resource**

The study website describes the resource and the types of data available and should give you a good idea as to whether ALSPAC would be potentially valuable in addressing your research question ([www.bristol.ac.uk/alspac](http://www.bristol.ac.uk/alspac)). You may require more detailed information on the variables available. If you need further information please send an e-mail to the ALSPAC executive ([alspac-exec@bris.ac.uk](mailto:alspac-exec@bris.ac.uk)) with the title 'Documentation request' expressing your wish to explore the ALSPAC resource for a potential research proposal. Your e-mail should include enough information for the executive to identify you as a *bona fide* researcher – i.e. your institution name, Department, your contact information and a brief explanation of your research interests.

You will then be provided with a CD (or download) containing the currently available metadata for the study. Information on biological samples and genotype data are not currently available on the documentation CD/Download. The process for working on genetic data and biological samples is described below.

We encourage data sharing to maximise use of the resource so the executive may put you in touch with other these groups working in the same area. The vast majority of the data are available for use on request and for these data we do not consider the issue of overlap. However, for recently acquired data, including questionnaire, clinic, genotyping and laboratory analysis data that have been collected via external funding the arrangements are different. These data will usually only be made available to test overlapping hypotheses one year after the data are cleaned and available for analysis unless a prior agreement has been obtained from the principal investigator of the project that funded the data collection.

## **Submitting a proposal**

If you decide that you would like to work on the ALSPAC resource you should complete an ALSPAC Research Proposal Form describing your proposed research (see Appendix 3) and send the completed form to the ALSPAC executive ([alspac-exec@bris.ac.uk](mailto:alspac-exec@bris.ac.uk)). This proposal form should have clearly stated aims and hypotheses and describe the relevant exposure, outcome and confounders that will be considered. The ALSPAC executive will reply, usually within two weeks, to inform you of the outcome and to provide advice on the next stages. In some cases, approval is withheld due to the lack of relevant data or biological samples. The executive will also estimate the cost of sharing data (see below). The Research Proposal Form includes a section setting out the rules for access and use of ALSPAC data. No proposal will be approved without this section being completed. The executive also reserve the right to impose additional restrictions as appropriate.

## **Analysis of existing data**

Once the proposal has been approved the executive will work out any costs of sharing data (see below) and allocate you a data buddy. Your data buddy will liaise with you over your request and the data you require. They will provide the dataset and advice on analysis of the dataset. Special procedures are required for some types of data such as potentially identifying data and genotype data. These procedures are described in the sections below. When we approve your proposal we may suggest that you discuss your proposal with researchers who have an intimate knowledge of the data you are requesting.

## **Potentially identifying data**

Some of the data collected could allow study participants to be identified. These include personal details such as postcode and "free text" that could contain identifying information. The study team will not link these data directly to the published data resource. Instead a two-stage process is required if you wish to make use of potentially identifying data. The potentially identifying data are sent to you as a separate file with an identifier but unmatched to any other data. You then derive new variables that are less specific and could not be used to identify an individual and return these new variables to the study team so that these new variables can be added to the rest of your data request. If the study team have not handled a request like yours before they will ask the ALSPAC Ethics and Law Committee to review and approve your proposal. The ALSPAC Ethics and Law Committee may ask you to attend a meeting to explain your proposal. If your proposal requires detailed potentially identifying data to address a scientific question you may be required to complete a Data Transfer Agreement (DTA) similar to that described below for genotype data.

## Genotype data

Research using SNP genotype data requires a legally-binding agreement between the University of Bristol and your host institution. This agreement is called a Data Transfer Agreement (DTA). For University of Bristol staff based outside the School of Social and Community Medicine a Data Service Level Agreement (DSLAs) is required. These forms differ in terms of the signatories required, not the access level received. A project specific appendix must be agreed before the agreements are signed.

Genotype data cannot be released until fully completed forms have been received. Copies of the DTA and DSLA are included as Appendices 4 and 7 as pdf files to show the information that is required. Once your proposal is approved we will provide word files with the specific appendix for you to complete, sign and return to us.

Genome Wide data is held by ALSPAC and, due to its potential for disclosure of identity, current ethical constraints require these data to be analysed in Bristol. We are working towards secure remote access that will enable direct access to these data in the future. ALSPAC is collaborating with several GWAS consortia with Bristol based researcher/s as members of the consortium. For further information about these projects or if you would like ALSPAC to contribute to a new consortium please contact the ALSPAC Executive ([alspac-exec@bris.ac.uk](mailto:alspac-exec@bris.ac.uk)) who will put you in touch with relevant researchers.

Bristol statisticians can also run bespoke analysis and provide summary data for approved projects on a non-collaborative basis. In such cases the group requesting the data will need to cover the cost of analysis. Such projects will be processed in order of receipt.

## Assays on biological samples and genotyping

To use biological samples or to carry out genotyping on ALSPAC DNA you need to complete the Research proposal form (Appendix 3) describing your proposed research. You must ensure you complete the specific sections on the biological samples and genotyping including details of the type of sample required, amount needed and in case of DNA the minimum concentration required. Please send the completed form to the ALSPAC executive ([alspac-exec@bris.ac.uk](mailto:alspac-exec@bris.ac.uk)). If you would like further information about samples or laboratory procedures please contact the ALSPAC laboratory ([alspac-exec@bris.ac.uk](mailto:alspac-exec@bris.ac.uk)). Decisions on the use of biological samples will consider the amount of the stored sample required, the amount in storage and the perceived scientific value of the proposed study. For genetic studies involving simple SNP analysis researchers are encouraged both to carry out genotyping on the whole cohort and to use K Biosciences (<http://www.kbioscience.co.uk>) rather than genotyping in their own laboratories. The company holds sets of ALSPAC DNA and their service is normally quicker and more economic both in terms of DNA use and genotyping costs than supplying DNA to individual researchers. Any order to genotype ALSPAC DNA at K Biosciences must be placed via the ALSPAC laboratory. Subsets of DNA samples can be provided for studies with high genotyping costs (eg GWAS). Such requests will be assessed on a case-by-case basis.

Samples, including DNA, are provided under the terms of a Material Transfer Agreement (MTA) or in the case of University of Bristol staff a Material Service Level Agreement (MSLA). Each agreement will include a project specific appendix detailing the samples ALSPAC will supply and the analysis to be completed. Samples will not be released until an agreement has been completed and signed. A sample MTA and SLA are contained in Appendix 5 and Appendix 6 as pdf files to show the information that is required. Once your proposal is approved we will provide word files with the specific appendix for you to complete, sign and return to us.

## Collection of new data

The ALSPAC study team collect new data from the study families using self-completed and on-line questionnaires and at ALSPAC study clinics. Data collection may be on the whole cohort or a sub set of the whole cohort (a sub study – see section below). The current plan for new data collection between

2011 and 2013 can be seen in Appendix 11. These questionnaires and clinics require funding (see section below) so where you have suggestions for new data collection you need to complete a Research Proposal Form (Appendix 3 describing your proposed research and ensure you complete the specific sections on new data collection and send the completed form to the ALSPAC executive ([alspac-exec@bris.ac.uk](mailto:alspac-exec@bris.ac.uk)). Please note that not all data collection will necessarily be approved - participant overload and other practical and ethical considerations will be taken into account when reaching a decision. Please note that you will need to gain approval for your proposal from the ALSPAC Ethics & Law Committee and probably also from an LREC. Investigators are encouraged to apply for funding for data collection two years in advance of the proposed start date for data collection to secure a commitment to include these data. Please note that our usual position is that we do not divulge individual results to study participants and consent to take part in the study has been granted on this basis. Our policy guidance regarding divulging biomedical information to individual participants can be seen in Appendix 8.

## **Sub studies**

In order to avoid overloading study participants, an individual participant should not normally be taking part in more than one sub-study at any given time. If, for sound scientific reasons, investigators request that we include a given participant in more than one sub-study concurrently, careful consideration will be given to the potential burden on that individual by the ALSPAC Executive and where necessary further ethical scrutiny will be requested.

## **Costs and grants**

ALSPAC receives funding from the Wellcome Trust, the Medical Research Council and the University of Bristol to support core activities. These do not extend to support for individual projects and researchers will be expected to meet additional costs. These will be determined on a project-by-project basis and will reflect only the true costs to ALSPAC of providing the resources requested. Once a proposal has been agreed the study team will then let you know how much it will cost and agree distribution of indirect income at this stage. If you are submitting a grant to cover the costs of the agreed research you must send the final copy of the grant including the finances for approval at least two weeks before the submission date. Proposals received less than two weeks before the submission deadline will not usually be approved. The executive are happy to provide a letter of support once your research has been approved and the budget has been agreed. For proposals to collect new data a member of the ALSPAC executive (or a Bristol based scientist nominated by the ALSPAC Executive) must be included as a co-applicant so they can act as guarantor for the proposed new data. You should send the executive a copy of the award letter when you receive this and the executive will then arrange a start up meeting followed by annual review meetings to agree the objectives, timetable and staff required to meet the grant commitments. More details on the approval of grants and the allocation of direct and indirect income are included in Appendix 9.

## **After approval**

We will publish copies of approved proposals on our website so people are aware of approved and ongoing work. We also reserve the right to make available analyses on our website or in correspondence to journals that have not been included in submitted papers.

## **Contact with study members**

Only members of the ALSPAC study team or researchers who are honorary members of the study team will be allowed to contact study participants directly.

## **Confidentiality**

Protecting the confidentiality of the study families is a primary concern of the ALSPAC executive and the ALSPAC study team. This is a particular issue as ALSPAC is a regionally based study that recruited children born within a defined period.

## **PR policy**

All press releases on research arising from the study should be seen and approved by the ALSPAC executive ([alspac-exec@bris.ac.uk](mailto:alspac-exec@bris.ac.uk)). We may decide to press release certain articles and will expect the lead author on the paper to agree the press release with the ALSPAC public relations team and to be available to deal with media enquiries and interviews. We may also ask authors to prepare a précis of important papers to include in reports to funders and future applications for future core support.

## **Authorship and publication**

Authorship on papers should follow standard practice. All full papers have to be sent along with a completed papers checklist to the ALSPAC Executive for approval ([alspac-exec@bris.ac.uk](mailto:alspac-exec@bris.ac.uk)). The executive expect to process all papers within two weeks of receipt. The executive read all papers to check confidentiality is protected; to ensure that the paper will not bring the study into disrepute. The executive also provide advice and feedback to authors where we feel this may be helpful but our role is not to provide formal peer review.

The ALSPAC executive would prefer to see all abstracts for presentation at meetings before submission.

A checklist of requirements for ALSPAC papers along with some accompanying notes explaining these requirements and containing appropriate text to insert is contained in Appendix 10. A completed checklist should be included with each paper submitted for approval. Researchers should send copies of the final submitted draft. Researchers should let the executive know when a paper is accepted and send through an electronic copy of the final published version. If your work on the resource was funded by the Wellcome Trust or other bodies that require open access to publications arising from their funding it is the authors' responsibility to ensure papers are freely available. A list of publications arising from the study can be found on the study website (<http://www.alspac.bristol.ac.uk>).

## **Intellectual property**

Intellectual property rights belong to the University of Bristol. We will consider dividing intellectual property rights where researchers outside of the University of Bristol will be making a particular contribution. Any such division must be considered and agreed before the research starts. Further information on the University of Bristol policy on intellectual property can be found on: <http://www.bris.ac.uk/research/knowledgetransfer/ip/ipownership.html>.

## **Acknowledgements**

We have agreed a standard acknowledgements section that should be included as is or in a modified form to fit the journal requirements for all papers:

" We are extremely grateful to all the families who took part in this study, the midwives for their help in recruiting them, and the whole ALSPAC team, which includes interviewers, computer and laboratory technicians, clerical workers, research scientists, volunteers, managers, receptionists and nurses. The UK Medical Research Council, the Wellcome Trust and the University of Bristol provide core support for

ALSPAC. This publication is the work of the authors and <insert names> will serve as guarantors for the contents of this paper and does not reflect the views of the ALSPAC executive. This research was specifically funded by <INSERT DETAILS FOR SPECIFIC PROJECT WHERE APPROPRIATE, including Welcome Trust grant number>.”

## **Feedback**

This policy was last updated in May 2011. We welcome feedback, comments and suggestions. Please send to ([alspac-exec@bris.ac.uk](mailto:alspac-exec@bris.ac.uk)).

## **Appendices**

<b>Appendix 1</b>	References describing ALSPAC
<b>Appendix 2</b>	Terms of reference for the ALSPAC Executive
<b>Appendix 3</b>	Research proposal form
<b>Appendix 4</b>	Data Transfer Agreement
<b>Appendix 5</b>	Material Transfer Agreement
<b>Appendix 6</b>	Material SLA
<b>Appendix 7</b>	Data SLA
<b>Appendix 8</b>	Policy guidance regarding divulging biomedical information to individual participants
<b>Appendix 9</b>	Policy on collaborative research with partners outside the School of Social and Community Medicine
<b>Appendix 10</b>	Publishing papers checklist
<b>Appendix 10a</b>	Supporting acknowledgements and study sample information for papers checklist
<b>Appendix 11</b>	ALSPAC New data collection plan 2011 - 2013