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For office use…
**MDAC-**

**Application** **for Access to Genotype Data and/or Biological samples from the Biomedical assessment of the 1958 birth cohort.**

*This form should be used to apply for samples, to request links between samples and/or phenotypes and/or genotypes, or to apply for the exome sequencing dataset* [EGAD00001001021](https://www.ebi.ac.uk/ega/datasets/EGAD00001001021)*. For other application types, please contact the Secretariat for advice on the correct application route.*

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| **1. Project Title** (up to 30 words, plain language) |  |  |

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| **2. Datatypes requested** |  | *Mark all that apply* |
| [ ]  1958 BC DNA [ ]  Genetic data held at EGA under WTCCC governance\*, needing linkage with other data or samples. [ ]  1958BC Samples [ ]  Other 1958BC genetic data e.g. exome sequencing data [*EGAD00001001021*](https://www.ebi.ac.uk/ega/datasets/EGAD00001001021)*\*See note in section 11 on data under WTCCC governance. Gender and broad region of residence do not need bespoke linkage.* |

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| **3. Plain language summary (PLS)** |
| **Please provide a clear, informative project summary for the committee and public. See METADAC’s** [**PLS guidance notes**](http://www.metadac.ac.uk/files/2017/06/v1.0-Plain-language-guidance-for-METADAC-applications.pdf)**.** 100-150 words. This will be published at www.metadac.ac.uk for successful applications. |

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| **4. Principle Applicant and contact** |  |  |
| *The principal applicant should be a senior academic/researcher/Project PI who can take long term responsibility for the projectPlease attach a short CV for the principal applicant (1-2 sides A4)* |

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|  |  | **Principal Applicant (attach CV)** | **Contact Person (if different)** |
| Applicant Name |  |  |  |
| Position Held |  |  |  |
| Affiliation |  |  |  |
| Address |  |  |  |
| Email |  |  |  |
| Telephone |  |  |  |
| ORCID ID ( see http://orcid.org/) |  |  |  |

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| **5. Co-applicants** |
|  |  | **Name** | **Affiliation** | **ORCID ID** |
| Co-applicant 1 |  |  |  |  |
| Co-applicant 2 |  |  |  |  |
| Co-applicant 3 |  |  |  |  |
| Co-applicant 4 |  |  |  |  |
| Co-applicant 5 |  |  |  |  |

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| **6. Project Details** |
| Key words for application |  |  |
| Proposed Project start Date |  | *DD/MM/YYYY*:  |
| Project finish Date\* |  | *DD/MM/YYYY*:  |
| *\*Data embargos, if granted, commence from date of data/sample issue* |

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| **7. Description of project**  |
| **Please state briefly how and why the 1958 birth cohort study is an appropriate resource for your project.**  |
| **Please provide a concise description of your project, expanding this section up to maximum 2 sides of A4. See METADAC’s web-site for a summary of the** [**assessment criteria**](http://www.metadac.ac.uk/data-access-committee/application-assessment-criteria/) **and full** [**1958BC data policy**](http://www.metadac.ac.uk/files/2016/04/1958bc-POLICY-DOCUMENT-v5-Jan-2015.pdf)**.***Please focus your description on the 1958 resource requested. You may include tables or figures.**Please discuss (i) the applicants, (ii) ethico-legal issues including likelihood of generating incidental findings of clinical significance and (iii) the science, using references to the work that informed the design of your study (provide these below).**If you are conducting a number of related studies, METADAC recommends that data supporting up to three publications can be requested in one application.***This section expands as required. Please use 1-2 sides of A4.** |
| **7c. Please provide key references for your project proposal (max 10 references).***References should show the work on which your project and methodology is based and/or your team’s recent research history.*  |

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| **8. Funding Details**  |
| Has the project been peer reviewed? |  | YES / NO |
| When was the project reviewed  |  | DD/MM/YYYY:  |
| Has the project been funded? |  | YES / NO |
| Name of funding organisation |  |  |
| Final Decision of the funders |  |  |
| Funding start date |  | DD/MM/YYYY:  |
| Funding end date |  | DD/MM/YYYY:  |

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| **9. DNA** |
| *Notes* |  | *Your requests should be consistent with the project description in section 4.* |
| Do you require DNA samples? |  | YES / NO If no please go to question 10, If YES please complete the following: |

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| **9.a. Requested Sample Details** |
| *Notes* |  | *Your request should be consistent with the project description in Section 3.* |
| Will the project analyse samples from all available samples/subjects in the cohort study? |  | YES/NO |
| IF NO, please define the subset required *(see guidance notes)*? |  |  |
| Quantity of DNA required |  |  (μg) per sample/subject[Please note standard aliquots of cell-line DNA are 1µg at a concentration of 50ng/µl but larger quantities and concentrations are available on request.] |
| Minimum concentration required |  |  (ng/μl) [Please note standard aliquots of cell-line DNA are 1µg at a concentration of 50ng/µl but larger quantities and concentrations are available on request.] |
| Number of subjects  |  |  |
| Is your request is for non cell-line DNA or a larger sample of cell-line DNA? |  | YES / NO  |
| If YES please justify the size of the sample you have requested |  |  |

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| **9.b. Intended use of DNA** |
| *Note: Your intentions should be consistent with the project description in section 4.* |
| SNP analysis? |  | YES / NO  | Approx. number of SNPS:  |
| Micro-satellite analysis? |  | YES / NO  | Approx. number of microsatellites:  |
| Sequencing? |  | YES / NO  | Approx. length to be sequenced:  |
| Structural DNA work (including copy number variation)? |  | YES / NO  |
| Methylation analysis |  | YES/NOIf YES, how will you use existing methylation data in your analysis? |
| Other? |  | Please specify: |

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| **9.c. Please provide details of where DNA will be analysed**  |
| Person responsible for analysis  |  |  |
| Laboratory address |  |  |

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| **9.d. DNA preparation, storage and transport**  |
| Are you happy to receive cell-line DNA? |  | YES / NO  |
| If NO, please provide an explanation for your requirements |  |  |
| Please provide a copy of the protocol(s) to be used for laboratory processing and analysis, including Q.A./Q.C. documentation |  | <These may be attached as a separate sheet to the application>Have you attached a copy of the protocol(s) to be used for laboratory processing and analysis? YES / NO  |
| *Note:* |  | *If you are seeking access to a finite resource, your application including protocols may be sent in confidence to external scientific peer-review.* |
| Are you aware that in order to obtain the DNA requested in this application, you are required to agree to return genotypes to enhance the 1958 BC resource? |  | YES / NO If yes, please sign and date below to confirm this agreement:Signature:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |
| Please indicate if you require an embargo period before other users can access the data |  |  YES/NO |
| *Note:*  |  | *Embargo period is up to 1 year from the date of issue of data/samples* |

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| **10. Other Biological Samples** |
| Will the project require access to biological samples other than DNA? |  | YES / NO If NO please go to question 11, If YES please complete the following: |
| Will the project process all available samples from the cohort study? |  | YES / NO IF NO, please carefully define the subset required |
| What sample types do you require |  | Plasma YES/NO  | Serum YES/NO  | Saliva YES/NO |
| For plasma, preferred anticoagulant |  | EDTA/CPDA/Citrate |  |  |
| Minimum sample quantity per subject |  |  |  |  |
| Do you require lymphoblastoid cell lines? |  | YES / NO  |

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| **10a. Sample analysis** |
| Please specify what will be analysed: |  |  |
| What is the justification for the volume/quantity requested? |  |  |
| *Notes* |  | *Your intentions should be consistent with the project description in section 4.* |
| Please confirm you have checked that the [processing and storage history](http://www.metadac.ac.uk/files/2015/07/1958BC-Biosamples.pdf) is suitable for your analysis |  | YES / NO If possible please provide evidence e.g. a publication or results of pilot study which show suitability of samples: |
| Please provide a copy of the protocol(s) to be used for laboratory processing and analysis |  | <*These may be attached as a separate sheet to the application*>Have you attached a copy of the protocol(s) to be used for laboratory processing and analysis? YES / NO  |
| *Notes* |  | *If you are seeking access to a finite resource, your application including protocols may be sent in confidence for external scientific peer-review.* |
| Are you aware that in order to obtain the samples requested, you are required to return the results of assays generated under your project to enhance the 1958 BC resource |  | YES / NO If yes, please sign and date below to confirm this agreement:Signature:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |
| Are you applying for an embargo period before other users can access the data (up to 1 year from the date of data/samples issue) |  | YES/NO If yes, for how long? |

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| **11. Genetic data governed by WTCCC** |
| *Notes: Access to most, but not all, of the 1958BC genetic data held at the EGA is managed by the WTCCC Consortium Data Access Committee. However, each dataset linked from* [*https://www.ebi.ac.uk/ega/datasets*](https://www.ebi.ac.uk/ega/datasets) *lists the specific access committee that manages that particular dataset, and this should be checked if you are not sure.* *The genome wide genotype and sequencing data from the 1958BC are held at the European Genome-phenome Archive (*[*EGA*](https://www.ebi.ac.uk/ega/home)*). By default these genetic data come labelled with a binary indicator of sex, and a 12-level indicator of region of residence in Great Britain, so these do not need to be requested as extras.* *The exception is the 1958BC exome dataset* [*EGAD00001001021*](https://www.ebi.ac.uk/ega/datasets/EGAD00001001021) *which, whether linked or unlinked to other data, should be considered by METADAC using section 12 of this form to apply.* |
| 11.a. Does your project require access to genetic data governed by WTCCC and held at the EGA? |  | YES / NO *If NO, please go on to Question 12.* |
| 11.b. Does your project require linkage of other data to genetic data held at EGA under WTCCC governance? |  | YES / NO *Answer NO if indicators of sex and broad region of residence are sufficient.* |
| 11.c. Which subsets of 1958BC data do you require from the archive at EGA?  |  | *This information is important, please consult the information provided at* [*http://www.wtccc.org.uk/info/access\_to\_data\_samples.html*](http://www.wtccc.org.uk/info/access_to_data_samples.html) |

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| **12. Other genetic data, e.g. sequencing data** |
| Do you want any other genetic data generated from the 1958BC (including that held at the EGA, but not controlled by the WTCCC CDAC)? |  | YES / NO *If NO, you do NOT need to complete this section, please proceed directly to question 13.* |
| If YES, please specify the data you require, e.g. “[EGAD00001001021](https://www.ebi.ac.uk/ega/datasets/EGAD00001001021) sequencing data”. |  |  |
| Was the genetic data you are requesting generated by a previous applicant for 1958BC samples or data? |  | YES / NO If YES, please indicate where those data are stored and under whose administration: |

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| **13. Other data (phenotypes/exposures)** |
| *Notes: All samples and genetic data can be released with indicators of sex and a twelve–level region of residence in Great Britain. Additional variables may be sensitive and are potentially disclosive. Careful attention is therefore paid to ensuring only necessary data are issued, and all variables must be carefully justified in the context of your analysis. This is particularly important if you request sensitive variables.* |
| Do you require the variables sex and region of residence? |  | Variable for sex: YES / NOVariable for 12-level region of residence: YES/NO |
| Do you require additional non-genetic variables*?* |  | YES / NO*If NO, you do NOT need to complete this section, please proceed directly to question 11.* If YES, please summarise and list the variables below: |
| Please summarise the variables required and carefully justify these: |  | *It is often helpful to state which variables are outcomes, exposures, confounders, or exclusions: this demonstrates that all variables are necessary for the analysis.* |
| If possible please detail the variables required (in an attached document) |  |  |
| *Notes: Your intentions should be consistent with the Plain Language Summary and the main project description.The 1958BC data dictionary is available at:* [*http://www.cls.ioe.ac.uk/datadictionary*](http://www.cls.ioe.ac.uk/datadictionary)*.**Queries concerning non-genetic data can be directed to the Centre for Longitudinal studies: clsfeedback@ioe.ac.uk* |

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| **14. New variables created by you** |
| Will any new variables be derived or produced in this project from data obtained from the 1958BC?  |  | YES / NO / unsure *If NO, you do not need to complete this section. Please proceed directly to question 15.* |
| If YES, what variables do you expect will be generated by your study |  | *Any derived variable, e.g. an overall activity score, polygenic risk scores, imputation, sample analyses* |
| If yes, are you aware that in order to obtain this data requested in this application, you should be willing to agree to return these variables to enhance the 1958BC resource? |  | YES / NOIf yes, please sign and date below to confirm this agreement:Signature:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |
| What managed-access data repository will your arising data be placed with (for example EGA accepts genetic datasets) |  | *[Guidance can be obtained by emailing* metadac@newcastle.ac.uk*.]* |
| Please indicate if you are applying for an embargo period before other users can access the data (up to 1 year from the date on which the data/samples are issued) |  | YES / NO |

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| **15. Data analysis**  |
| Do you have a geneticist to assess potential incidental findings? |  | YES/NOIf YES, state name and affiliation. If NO, state why this is not needed. |
| Who is responsible for statistical analysis? |  | *Please provide a single name of the person responsible for statistical analysis* |
| Name |  |  |
| Affiliation |  |  |
| Email |  |  |
| Telephone |  |  |

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| **15b. Sample Size Calculations** |
| Please provide a brief overview of sample size calculations for your proposed study: |

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| **16. Data stewardship** |
| *Note: METADAC must be informed immediately of any proposed changes, for example when the Principal Applicant leaves a project or changes institution.* |
| Do you agree to obtain prior approval from METADAC of any changes to data stewardship ie. Change of PI, change of institution. |  |  YES / NO |
| Do you agree to securely destroy your local copy of 1958 data within 2 years of submitting a final report to METADAC, or sooner if you leave the institution where it is held (unless appointing a new data steward, or a data retention plan is agreed). |  |  YES / NO |

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| **17. Agreement** |
| **To be completed and signed by the Principal Applicant:** |
| Can you confirm that you have read the above application? | YES / NO |
| Is the information contained in it is true to the best of your knowledge? | YES / NO |
| Are you aware that a comprehensive description of all policies and procedures relating to access to data and biosamples from the biomedical resource of the 1958BC/NCDS may be obtained at: [http://www.metadac.ac.uk/files/2015/07/POLICY-DOCUMENT-FINAL-Vsn-4.0-DEC-2014.pdf](http://www.metadac.ac.uk/files/2015/07/POLICY-DOCUMENT-FINAL-Vsn-4.0-DEC-2014.pdf%20)  | YES / NO |
| Are you aware that it is a violation of 1958BC access policies to attempt to use any information, data or biosamples derived from the study to attempt to identify individual study participants or to infer information about individual participants? | YES / NO |
| Do you agree not to link or combine the data to other information or archived data available in a way that could re-identify the Research Participants, even if access to that data has been formally granted to you or is freely available without restriction. | YES / NO |
| Do you understand that data and samples from the 1958BC resource cannot be used for commercial purposes? | YES / NO |
| Are you aware that if you, a member of your group, or your institution were to use these data for a purpose that could be construed as being commercial, *without* obtaining prior approval from the METADAC committee, you will be in breach of the material and/or data transfer agreements, and that this might result in you being excluded from using the 1958BC resource in the future? | YES / NO |
| Do you understand that if you undertake work that might potentially be viewed as commercial, it is your responsibility to seek the advice of the METADAC? | YES / NO |
| Do you understand that you must not pass on any data or samples awarded, or any derived variables or genotypes generated by this application to a third party (i.e. to anybody that is not included in this list of applicants on this project, nor is a direct employee of one of these applicants)? This would include any sharing of individual level data with a publicly accessible archive. Where a journal requires data to be made available, you should instead include a link to the METADAC at www.metadac.ac.uk | YES / NO |
| Are you aware that any third party seeking to use data, samples, or derived variables or genotypes arising from this application must approach the METADAC to obtain access permission of their own? | YES / NO |
| Data security:Do you agree to ensure the data are kept securely and only accessible to the named applicants? | YES / NO |
| Do you understand that if a problem arises involving any misuse of the 1958BC data or samples provided for this project - that violates any of the terms and conditions specified by the MTA or DTA that you have signed (as the principal applicant) or contravenes any of the answers you have given above will mean that you will be held responsible, and that this might result in you being excluded from using the 1958BC resource in the future? | YES / NO |
| Do you understand that the conditions of issue of 1958 data originate from the consents and ethical approvals of the study, and cannot be varied under any circumstance: your funders’ and publishers’ requirements must be compatible with these and a local ethical committee cannot require anything in conflict with these conditions. A statement to use to confirm this ethical approval to your REC is available online at [www.metadac.ac.uk/1958bc-resource-types/1958bc-biomedical-resource](http://www.metadac.ac.uk/1958bc-resource-types/1958bc-biomedical-resource). | YES/NO |
| If your study produces incidental information on genetic variants that could potentially meet the three criteria in guidance section 6 (attached), do you agree to return these data to Understanding Society within 3 months of the end of the agreement? | YES / NO |
| Any publications resulting from the use of these data must include an acknowledgment of METADAC and the 1958BC study, as shown at <http://www.metadac.ac.uk/acknowledging-1958-birth-cohort-resources-in-publications/> . A copy of publication must be provided to METADAC. Do you agree to this condition? | YES / NO |
| Please confirm you agree to METADAC publishing your lay summary of your project on our website. | YES / NO |
| Signature:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_Print Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |

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| **Please email completed forms to:**  |
| **Dr Stephanie Roberts**Head of METADAC SecretariatD2K Group, PEALSNewcastle UniversityTel : not yet availableemail: metadac@newcastle.ac.uk |

Please check our website for the next [METADAC application deadlines](http://www.metadac.ac.uk/data-access-committee/metadac-meeting-dates/)

**Additional information for guidance**:

Please note that assuming your application to the 1958 Birth Cohort resource is successful the final approval will be subject to the following stipulations:

1. Data and samples from the 1958BC resource cannot be used for commercial purposes and any commercial involvement would breach the basis on which the access has been awarded.
2. Third party sharing of either data or biosamples is strictly prohibited. Any third party seeking to use the data, samples or derived variables or genotypes must apply directly to the METADAC to obtain access permission in their own right. When your work is published, any journal seeking to provide access to the underlying data must provide links to the 1958BC resource and METADAC and not to the data itself.
3. The Access Committee requires that, where possible, individual level data items created de novo are made available to other users in accordance with contemporary best practice and taking appropriate account of ethico-legal restrictions and recognising any potential risks of disclosures of summary level genotypes[[1]](#endnote-1). If you believe that there is some reason that you can’t meet this stipulation, please contact the METADAC Secretariat.
4. For applications involving linked phenotype and genotype data it is important to note that once an award has been made, any future additions to the dataset (for example, if an additional linked phenotype variable is required) will have to be processed by the METADAC Technical Review Team and must comply with the original application. If you do need additional variables to be added, you should therefore inform the METADAC Secretariat.
5. Applicants are reminded that the Terms and Conditions for the cohort explicitly forbid any attempt to identify individuals or to compromise or otherwise infringe the confidentiality of information on data subjects and their right to privacy.
6. **Incidental findings of clinical significance and potential benefit**

In signing their original consent forms for inclusion in the 1958BC Biomedical Survey (2002-2003), consenting participants agreed that they would not receive feedback about any individual genetic results: *“...no information found in the DNA will be given to me”* (NCDS Medical Follow-Up, Consent Form 2 – blood samples)*.* In keeping with this wording the current policy for 1958BC is that *no* genotypic information (regardless of its nature) will be returned to cohort members.

To date, most informed commentators have seen this position as ‘good practice’ because nobody has really known how to interpret the clinical relevance of the genetic variants that have been identified: their effects have typically been rather small and there has been no agreed way in which to respond to the limited increases in risk they may convey. But in common with many of the world’s major cohort studies and biobanks, the 1958BC recognises that national and international views of what constitutes ‘best practice’ might be about to change. For example, as outlined by a senior international commentator in the field[2](#_ENREF_1), it is possible that in the future it may become mandatory to report genetic results to participants if they satisfy three key requirements:

 **(i) scientific validity** (the genotyping is of adequate quality);

 **(ii) clinical significance** (the disease or condition caused by the genetic variant is potentially serious) , and

 **(iii) potential benefit** (*i.e.* a valid approach exists to prevent or cure the condition/disease of concern and that early knowledge of the genetic risk to which an individual is exposed could enhance the efficacy of that prevention/cure).

At present a change in what is seen as best practice remains no more than a hypothetical possibility, but findings that satisfy the three stated criteria are likely to become more common as the global scientific focus moves to full sequencing of genes and/or longer segments of DNA. The METADAC therefore wishes to help contribute to the national and international evidence-base on which any future strategic decisions might be made regarding policy for feeding back genetic results.

For this reason, **the METADAC now *requires* that if in the course of any analysis of DNA from any participant in the 1958BC, a genetic variant is found that could potentially be viewed as meeting all three of the criteria stated above, that information must be transmitted to the METADAC.**

At this stage this is no more than an exercise in collection of key data to assist us in developing an appropriate future strategy for the 1958BC – transmission of any information in this manner does not absolve the research group which generates the relevant finding from having their own internal policy to deal with this globally recognised problem. It is also important to ensure that your research group policy is consistent with the facts that: (1) at present NO genetic information can be returned to 1958BC participants; and (2) even if that policy were to change, all such contacts with cohort members would necessarily be undertaken by the Centre for Longitudinal Studies (contactable via METADAC). These requirements are immutable under any circumstances – even at the direction of an ethics committee that has reviewed your (the research group’s) project.

1. 1.. (Policy for Use and Oversight of Samples and Data arising from the 1958 Cohort at <http://www2.le.ac.uk/projects/birthcohort/oversight-committee>)

2. Knoppers BM, Joly Y, Simard J, Durocher F. The emergence of an ethical duty to disclose genetic research results: international perspectives. *Eur J Hum Genet* 2006;14(11):1170-8. [↑](#endnote-ref-1)