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Protocol status: Working
 We use this protocol and it's working

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University Published Paper Reproducibility Assessment Protocol - For students

In 1 collection

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ABSTRACT

This protocol is for students carrying out a literature/data curation exercise to crowdsource and determining whether the data availability of papers from a university meets the national, funder, university and journal policies. The teachers setting up this assessment have a separate related protocol they need to follow, and they will ultimately collate and mark these results.

Keywords: Open Data,
Reproducibility, Reproducible
Research

1 Find the assigned papers

Each student should have been assigned a number of papers in a spreadsheet that they need to assess.

1.1 Find your assignments, and start the exercise by looking at the first assigned paper, clicking on the identifier (handle, URL, etc.) and locating the paper to assess via its DOI.

The screenshot shows the 'The HKU Scholars Hub' website. The header includes the university logo and navigation links: Home, Publications, Researchers, Organizations, Grants, Datasets, Theses, Patents, and Community Service. The main content area displays details for an article titled 'Glucose-6-phosphate dehydrogenase deficiency and physical and mental health until adolescence'. On the left sidebar, there are links for downloading the full text (content.pdf), contacting the author(s), and links for fulltext (May Require Subscription). The article details include authors (Kwok, MK, Leung, GM, Schooling, CM), issue date (2016), publisher (Public Library of Science), citation (PLoS One, 2016, v. 11, p. e0166192), persistent identifier (http://hdl.handle.net/10722/262260), ISSN (1932-6203), and ISI Accession Number ID (WOS:000387615200068). A red arrow points to the DOI link in the citation field, labeled 'Assigned paper DOI'.

Article: Glucose-6-phosphate dehydrogenase deficiency and physical and mental health until adolescence	
Show simple item record Show full item record Export item record	
Title	Glucose-6-phosphate dehydrogenase deficiency and physical and mental health until adolescence
Authors	Kwok, MK, Leung, GM, Schooling, CM
Issue Date	2016
Publisher	Public Library of Science. The Journal's web site is located at http://www.plosone.org/home.action
Citation	PLoS One, 2016, v. 11, p. e0166192 <i>How to Cite?</i> DOI: http://dx.doi.org/10.1371/journal.pone.0166192
Persistent Identifier	http://hdl.handle.net/10722/262260
ISSN	1932-6203 2017 Impact Factor: 2.766 2015 SCImago Journal Rankings: 1.395
ISI Accession Number ID	WOS:000387615200068

University IR/CRIS landing page showing the assigned paper DOI that needs to be clicked on and assessed.

2 Assess the assigned paper to see if there is data

Quickly scan through the first paper on the list alongside any supplemental files to look for mentions of any supporting data. If there is no data in the paper (e.g. it is an opinion article, an erratum, covers a purely theoretical subject, or some other type of paper purely discussing rather than carrying out data production) then mark it as not having data and go to the next paper on the list.

OPEN ACCESS

CORRECTION

Correction: EZH2-Mediated H3K27me3 Is Involved in Epigenetic Repression of Deleted in Liver Cancer 1 in Human Cancers

Sandy Leung-Kuen Au, Carmen Chak-Lui Wong, Joyce Man-Fong Lee, Chun-Ming Wong, Irene Oi-Lin Ng

Published: January 24, 2014 • <https://doi.org/10.1371/annotation/9085e9bd-25b1-4266-b6db-34e56d80ce3a>

Article	Metrics	Comments	Media Coverage

Reader Comments (0)

Media Coverage

An error occurred which caused only one of the two designated corresponding authors to appear. Dr. Chun-Ming Wong is also a corresponding author and can be contacted at jackwong@pathology.hku.hk.

Citation: Au SL-K, Wong CC-L, Lee JM-F, Wong C-M, Ng IO-L (2014) Correction: EZH2-Mediated H3K27me3 Is Involved in Epigenetic Repression of Deleted in Liver Cancer 1 in Human Cancers. PLoS ONE 9(1): 10.1371/annotation/9085e9bd-25b1-4266-b6db-34e56d80ce3a. <https://doi.org/10.1371/annotation/9085e9bd-25b1-4266-b6db-34e56d80ce3a>

Published: January 24, 2014

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Competing interests: No competing interests declared.

Example of a Correction/Errata article that does not present any data. This should be marked as not having any data and the student should move on to the next paper.

3 If there is data, find it in the paper

3.1 You will not need to properly read and digest the contents of the paper, but aim to spend 5-10

minutes going through the manuscript, trying to understand what type of experiments have been carried out, and what likely data has been produced in the process of publishing the research.

- 3.2 In particular, concentration should be given for checking the Methods, Results and if there is a specific "Data Availability" section in the paper. PLOS for example has a "Data Availability" section in their structured abstract/article front page and a "Supporting information" section at the end of their papers.

OPEN ACCESS

Citation: Kwok MK, Leung GM, Schooling CM (2016) Glucose-6-Phosphate Dehydrogenase Deficiency and Physical and Mental Health until Adolescence. PLoS ONE 11(11): e0166192. doi:10.1371/journal.pone.0166192

Editor: Junwen Wang, Mayo Clinic Arizona, UNITED STATES

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Data Availability Statement: Data are available upon request from the "Children of 1997" data access committee: aprmay97@hku.hk. The volume and complexity of the data collected precludes public data deposition, because the participants could be identifiable from such extensive data which would comprise participant privacy.

Funding: This work was a sub-study of the "Children of 1997" birth cohort which was initially supported by the Health Care and Promotion Fund, Health and Welfare Bureau, Government of the Hong Kong SAR [HCPF Grant # 216106] and re-established in 2005 funded by the Health and

RESEARCH ARTICLE

Glucose-6-Phosphate Dehydrogenase Deficiency and Physical and Mental Health until Adolescence

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Abstract

Background

To examine the association of glucose-6-phosphate dehydrogenase (G6PD) deficiency with adolescent physical and mental health, as effects of G6PD deficiency on health are rarely reported.

Methods

In a population-representative Chinese birth cohort: "Children of 1997" (n = 8,327), we estimated the adjusted associations of G6PD deficiency with growth using generalized estimating equations, with pubertal onset using interval censored regression, with hospitalization using Cox proportional hazards regression and with size, blood pressure, pubertal maturation and mental health using linear regression with multiple imputation and inverse probability weighting.

Results

Among 5,520 screened adolescents (66% follow-up), 4.8% boys and 0.5% girls had G6PD deficiency. G6PD-deficiency was not associated with birth weight-for-gestational age or length/height gain into adolescence, but was associated with lower childhood body mass index (BMI) gain (-0.38 z-score, 95% confidence interval (CI) -0.57, -0.20), adjusted for sex and parental education, and later onset of pubic hair development (time ratio = 1.029, 95% CI 1.007, 1.050). G6PD deficiency was not associated with blood pressure, height, BMI or mental health in adolescence, nor with serious infectious morbidity until adolescence.

Conclusions

G6PD deficient adolescents had broadly similar physical and mental health indicators, but transiently lower BMI gain and later pubic hair development, whose long-term implications warrant investigation.

Structured data availability section

Example of a structured Data Availability Statement on the front page of a PLOS One paper. Source: Kwok MK et al. (2016) PLoS ONE <https://doi.org/10.1371/journal.pone.0166192>

3.3 Make a note if all of the data is in the manuscript itself (figures, tables or included supplemental files) or accessible via external sources – e.g. via database accession numbers or linked via URLs or data DOIs to data repositories such as figshare, zenodo or Dryad.

3.4 If data is only available on request make a note of the reasons given and details of who to contact to access the data. Having access to the raw data is most important, so make a note in the comments section of the spreadsheet if that is available.

4 Check external sources for data

If external data sources have been mentioned, e.g. database accessions or URL/DOI links to datasets, check if these are working by clicking on the URLs or finding the online databases mentioned.

4.1 If a database and accession number is listed, access the database mentioned in the paper and search it for the accession number (input the accession number and click search).

The screenshot shows the NCBI search interface. At the top, the NIH logo and 'U.S. National Library of Medicine' are visible. A search bar contains 'MK033747' and a 'Search' button. Below the search bar, it says 'Search results for: MK033747'. The main section is titled 'Results by database' and shows 'Results found in 0 databases'. There are three columns: Literature, Genes, and Proteins. Each column has a list of databases with a count of 0 for each.

Literature	Genes	Proteins
Bookshelf 0	Gene 0	Conserved Domains 0
MeSH 0	GEO DataSets 0	Identical Protein Groups 0
NLM Catalog 0	GEO Profiles 0	Protein 0
PubMed 0	HomoloGene 0	Protein Clusters 0
PubMed Central 0	PopSet 0	Sparcle 0
		Structure 0

Example of an external data source: checking the NCBI database (www.ncbi.nlm.nih.gov) to see if the data accession number given in the paper is working.

4.2 If a URL or DOI is listed in the paper as being the source of the data, test to see if it works.

Note

In both cases test if the datasets are available for download and there is not just a landing page

The screenshot shows a Figshare dataset entry. At the top is the Figshare logo and a search bar. Below is a table with columns A through G. The table contains data for 'Healthy Subjects' and 'CSM patients'. The 'ALFF value' is listed as the dataset name. Below the table, there are tabs for 'Healthy Subjects' and 'CSM patients'. A red arrow points to the 'Download (15.02 kB)' button, which is labeled 'Data available for download'. Other buttons include 'Cite', 'Share', 'Embed', and '+ Collect (you need to log in first)'.

	A	B	C	D	E	F	G
1	Healthy Subjects	Age	Gender	ALFF value			
2				whole cervical cord	C2 Segment	C3 Segment	C4 Segment
3	H1	22	M	8.07711854775747	10.6471538345019	8.87917053699493	8.17522593339284
4	H2	22	M	7.40367069774204	8.07260668277741	8.08349110682805	7.38641947507858
5	H3	24	M	17.4442264556885	17.858954111735	16.0015509128571	16.701961795489
6	H4	24	F	20.1915312051773	18.5077528423733	18.4903857707977	21.8259948094686
7	H5	25	M	11.4124139573839	10.8312650918961	10.8686059713364	11.0926957130432
8	H6	25	M	12.9601485133171	17.4733324050903	13.7455433607101	13.0199149052302
9	H7	26	M	10.9881471612718	12.1116325000000	11.9006456666523	

ALFF value.xlsx (15.02 kB) **Data available for download**

[Cite](#) [Download \(15.02 kB\)](#) [Share](#) [Embed](#) [+ Collect \(you need to log in first\)](#)

Example of a figshare dataset entry linked via DOI from a paper where the data (.xlsx file) is available for download. Source: <http://dx.doi.org/10.6084/m9.figshare.4233887>

5 Summarise results on whether data is available

Once you have checked the paper and any supplemental and external data sources for data and input all of this information into the spreadsheet, make an overall rating on whether you feel the data is available without restriction, if data is available on request, or if data is missing. Once this example is complete go to the next paper on the list and assess that in the same manner. Once this literature curation exercise is complete send the results back to the teacher to be marked and collated alongside all of the other crowdsourced results from the other students.