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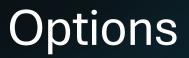
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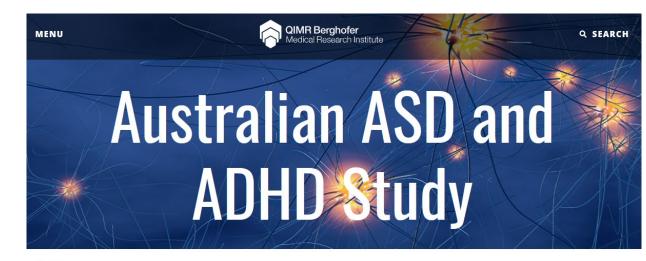
Where to get data?





- 1. Recruit a large sample
 - From clinics
 - From the public

www.aaastudy.org.au



Home

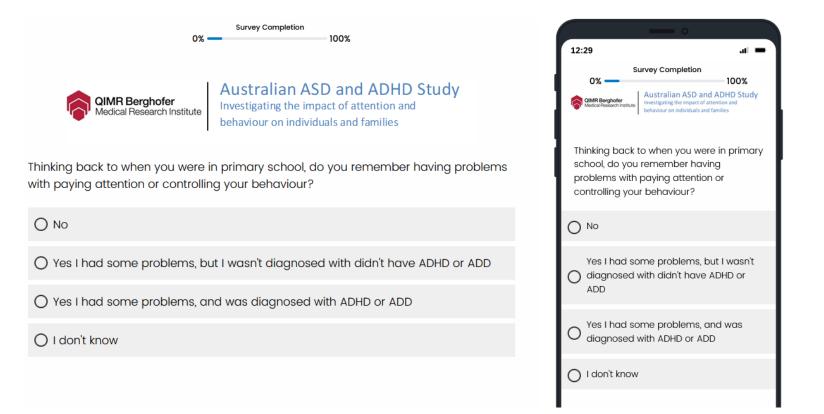
PARTICIPATE NOW



Australian ASD and ADHD Study

Investigating the impact of attention and behaviour on individuals and families

2. Collect information from the participants

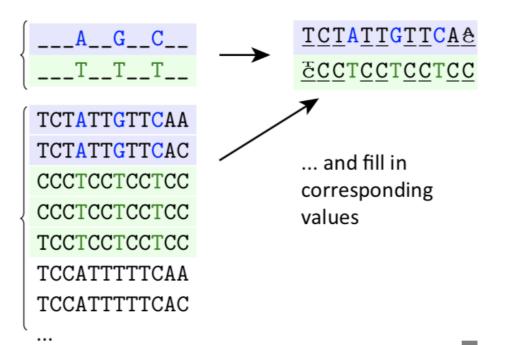


3. Collect a DNA sample

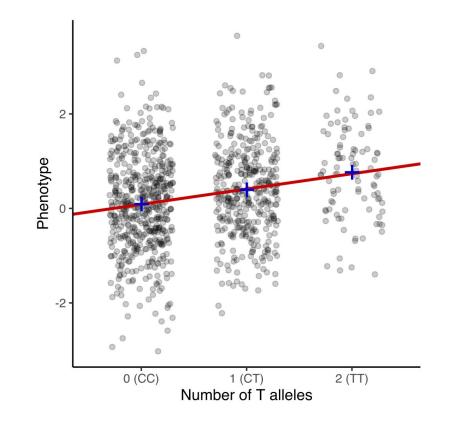


4. Genotype the samples





5. Look for genetic variants that can predict trait (regression)



'Open' Biobanks **biobank**

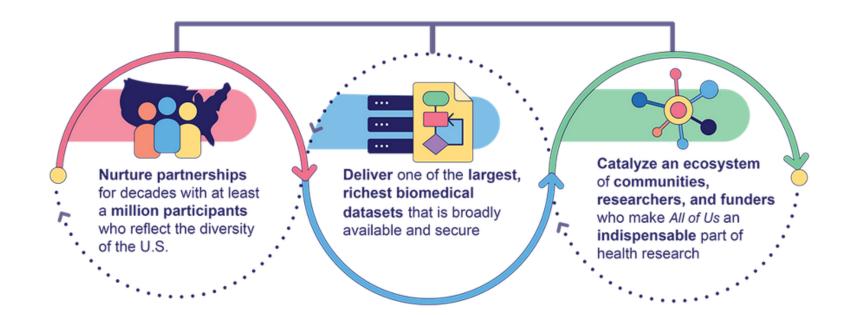
- Until recently you could apply to download the phenotypes and genotypes
- From now on you need to use the Research Analysis Platform (UKB-RAP)



'Open' Biobanks



- Access via RAP
 - Obtaining an account can be difficult if you are not a US person
 - No access/approval costs
 - Running costs \$\$\$



Working on a RAP

- RAP costs \$\$\$\$
- Remember to stop processes that are not needed
- Deleting data not needed
- Timing can be difficult to work out
- Share code and knowledge to help others
- Downloading data/results files may require approval
 - ALLofUS approval to download sumstats took about 2 days

Smaller biobanks

- Health and Retirement Study <u>https://hrs.isr.umich.edu/about</u>
- Nurses health study <u>https://nurseshealthstudy.org/</u>
- ROSMAP <u>https://dss.niagads.org/cohorts/religious-orders-study-</u> <u>memory-and-aging-project-rosmap/</u>
- ALSPAC <u>https://www.bristol.ac.uk/alspac/</u>

'Closed' Biobanks

- Access via collaboration often via a data-buddy system
 - 23andMe
 - Million Veterans Study
 - BioVU
 - MOBA
 - Kadoorie Biobank
 - etc...



Biospecimen Cohort Locator Click here for the Biospecimen Cohort Locator

Biobank Locator

There are currently 396 registered biobanks that have given permission to be listed. Please note that the list includes both Canadian and International biobanks.

If you can not find the biobank or types of biospecimens you are looking for, click here for a list of other online resources.

Other sources of raw (real) data

Welcome to openSNP

openSNP allows customers of direct-to-customer genetic tests to publish their test results, find others with similar genetic variations, learn more about their results by getting the latest primary literature on their variations, and help scientists find new associations.

Download data Sign up

About Us

openSNP

openSNP is a community-driven and community-owned project which lives through the contributions of its members. It is not associated with any institution and the only funding source for openSNP is continuous crowdfunding, which pays for the hosting costs.

Who's running the openSNP.org infrastructure?

The bulk of the coding was done by Bastian Greshake Tzovaras, Helge Rausch and Philipp Bayer, who are also taking care of running and maintaining the live website.

Bastian is working on his PhD in bioinformatics at the University of Frankfurt, while Philipp already successfully took that step and is now a bioinformatics post-doc at the University of Western Australia in Perth. Helge is working and living as a webdesigner in Berlin and probably the biggest reason why this website still works.

Getting in Touch

There are several ways to get in touch with us - the code is hosted at GitHub where we of course accept pull requests, there's a Gitter channel if you want to chat to us, and you can reach out to us at the above Twitter handles or @openSNPorg.

In addition to that openSNP thrives through the kindness of dedicated contributors who have made numerous contributions. Each and every one of them is celebrated in our humans.txt.

Philipp Bayer



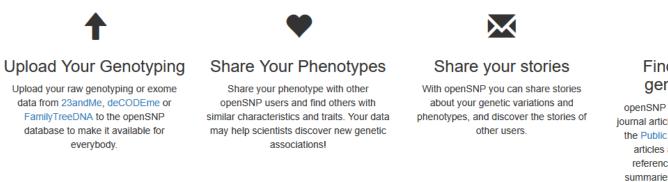
Helge Rausch



Bastian Greshake Tzovaras







For Scientists

Open SNP

Q

Search for phenotypes

Many diseases and traits are suspected to have genetical components. Genome Wide Association Studies are a simple tool find genetic markers. Easily find people with the variation you are interested in via openSNP. The variation you are looking for is not entered yet? Just add it to openSNP

↓

Easily download datasets

The mass download-function of openSNP allows you to easily download the full genotyping raw-data in the file formats that are provided by 23andMe, deCODEme and FamilyTreeDNA. As the files can be grouped by their variations for specific phenotypes it is easy to get datasets that are already usable for association studies.

Find literature on genetic variation

openSNP gets the latest open access journal articles on genetic variations from the Public Library of Science. Popular articles are indexed via the social reference manager Mendeley and summaries are provided by SNPedia.

Get notified about new data

openSNP delivers a RSS feed for each phenotype. So you can easily get all new datasets that get available for the phenotypes of your interest, without the need to check for new entries by hand. For all data junkies that need more data: There is also a feed that carries all new datasets.

Places to get sumstats

- All of US phenotypes (run by the Broad) you need a RAP account to be able to access
- UK Biobank phenotypes (run by the Broad) https://pan.ukbb.broadinstitute.org/downloads
- FinGen <u>https://www.finngen.fi/en/access_results</u> <u>https://mvp-ukbb.finngen.fi/</u>
- Million Veterans <u>https://www.mvp.va.gov/pwa/discover-mvp-</u> <u>data</u>

Places to get sumstats

- PGC <u>https://pgc.unc.edu/for-researchers/download-results/</u>
- GIANT -

https://portals.broadinstitute.org/collaboration/giant/index.php/G IANT_consortium_data_files

- ENIGMA <u>https://enigma.ini.usc.edu/research/download-enigma-gwas-results/</u>
- GWAS Catalogue <u>https://www.ebi.ac.uk/gwas/</u> (patchy)
- SSGAC <u>https://thessgac.com/</u> (requires account)
- Authors of papers

Questions, comments, concerns...