



# Bringing the Power of Synthetic Data Generation to the Masses

## What is Terra?

Terra is a scalable platform for biomedical research where you can access data, run analysis tools, and collaborate - all in one place. Terra is being developed by the Broad Institute of MIT and Harvard in collaboration with Verily Life Sciences.

### Data

- Upload your data to the cloud
- Access data we host (i.e. CCDG, TOPMed and more. Available soon!)

### Tools

- Align & QC sequence data per sample
- Call short variants per sample
- Joint-call across population Filter & QC

### Analysis

- Interrogate data in real time
- Interactive Jupyter notebooks GWAS with Hail

### Sharing Results

- Export results and figures for publication
- Seamless collaboration

## How to Access Terra (app.terra.bio)

### Before you can register

The Terra platform requires a Google account. This can be a Gmail account, an institutional Google Apps account, or any Google Apps account that you create.

#### If you don't have a Gmail address or other Google account

You can create a Google Apps account associated with your existing email address;

1. Go to the Google sign-up page (<https://accounts.google.com/SignUp>)
2. Under "Choose your username", click "I prefer to use my current email address"
3. Once you have this new google account set up, you'll be able to register for Terra with that email address.

### How to register

You will need to be whitelisted to use the app.terra.bio platform.

**To get on the whitelist, please email Tiffany Miller** at [tiffanym@broadinstitute.org](mailto:tiffanym@broadinstitute.org) from the gmail address that you will use for access (or include the Google account you want to use). Tiffany will email you back with the hackathon billing project name and github details.



# After the Hackathon

## Free Credits on Terra

To get users started on Terra, we offer a Free Credits program. Users will get \$300 of free credits and a free credits billing account to use for querying, executing or storing data on Google Cloud Platform. The free credits expire December 30, 2019 or 60 days after they were issued, whichever comes first. Credits aren't redeemable for cash and are not transferable.

The Terra Free Credits Program ("credits") is sponsored by Google and administered by Onix Networking ("Onix"), a Google Cloud Premier Partner. Onix will contact you during the trial with information on options for creating your own billing account to use Terra once the credits expire. Other billing options will be available on the Terra website.

For more information on free credits in Terra, see this article.

## How to get credits

To take advantage of this opportunity, all you need to do is register for an account on the Terra portal (which is itself always free and open to all). When you log into Terra you will see a banner at the top of the screen welcoming you to the trial. Click "Start Trial," accept the Terms and Conditions, and you will be issued a Terra billing project with the free credit. It is as simple as that!

Note on the Terra Billing Project: The billing project will have the following naming convention: fccredits-xxx-xxx-xxxx. Be sure to use this billing project whenever prompted in Terra. Starting the trial will also activate the sixty-day countdown.

We reserve the right to accept or reject applications for credits at our discretion. This is intended to protect against any attempts to abuse the credits program, since our goal is to give as many people as possible the opportunity to try out the platform. The credit funding is not endless, so we have the right to stop the program when we hit our budget.

## Free Credits Legal Language

By opting into this program, you are authorizing Terra to give Onix and Google access to your Terra user profile information. This is necessary for Onix and Google to give you the free credits.

All use of Terra by researchers is subject to the Terra Terms of Use, which may be updated from time to time. Terra reserves the right to revoke credits for any activity that violates the Terms of Use.

