

<b>Title</b>	State of the openSNP.org Union: Dockerizing, Crowdfunding & Opening for Contributors
<b>Author</b>	<i>Bastian Greshake</i> , Philipp E. Bayer, Helge Rausch, Lore Mroz, Julia Reda
<b>Affiliation</b>	openSNP.org
<b>Contact</b>	info@opensnp.org
<b>URL</b>	<a href="#">the project</a> and <a href="#">the code</a>
<b>License</b>	Code: MIT License, Data: CC-Zero

*openSNP* is a central open-data repository for people who got their genomes analyzed through Direct-To-Consumer (DTC) genetic testing channels. The project allows people to publish their genetic data, along with phenotypic annotations and quantified self data, into the public domain using a Creative Commons Zero license. *openSNP* offers annotations for the tested genetic variants, by mining different public and open data sets, such as the Public Library of Science, *SNPedia*, *Mendeley* and more.

Since our presentation last year, at BOSC2015, our database has grown even further, from nearly 1,700 data sets to now over 2,500 published genotypes. Additionally there are now over 370 different phenotypes listed for which over 38,000 annotations were entered. This makes *openSNP* one of the largest data resources of this type. With this data the project actively contributes to the discussion on open human genetic data, such as [bioethical implications](#) and [privacy research](#), genealogy, teaching, [pharmacogenomics](#) and even [art](#).

Unlike many other projects of its kind, *openSNP* is not hosted or supported by any university or other academic institution. Instead it is completely driven and maintained by the community of people sharing and using it. This means that the project is facing some unique problems. Due to this, we had to make 2015 a year of consolidation.

With the increasing growth of the database, we had to optimize our infrastructure. On the technical side this meant moving from a monolithic server-based installation to running in multiple Docker containers, hosted on 3 small virtual servers, optimized to specific tasks. But upgrading our server infrastructure also meant that the project could not be funded solely by our core team's day jobs any longer.

Instead of relying only on official funding bodies or corporate sponsors we chose to turn to crowd-funding via the platforms of [Patreon](#) and [Gratipay](#), which both allow for recurring donations by individuals. Since the beginning of the campaign in autumn 2015 we could win around 30 people to contribute financially. Thanks to this, we can now pay our infrastructure costs for running the project through the cumulative efforts of small donations from the crowd. Furthermore we got one corporate contributor on board, but decided to limit its contributions in order to stay independent.

In this talk we will give a small summary of how we performed our infrastructural updates, managed to run a successful crowdfunding campaign, the political implications of corporate sponsorship and how we prepared for new contributors.