














Many heterogenic disorders can be caused by pathogenic mutations in tens or even hundreds of genes. Next-generation sequencing methods are offering a way to generate sequence data of all such genes or even the whole exome or genome.

GeneTalk's **Gene Panels** help you analyzing the sequence variants in certain regions of interest efficiently. You can list, for example, all genes related to a molecular pathway or genes associated with a certain phenotype in a gene panel and use it for filtering.

Gene panels are also used as a means to declare your expertise. You can state a level of expertise for a gene panel to be contacted by other users. And – vice versa – you can find experts for certain genes and contact them to discuss your variants or find other patients.



My Gene Panels		Public Gene Panels				
Name	Description	Number of genes	Followers	Author	Actions	
GPI anchor synthesis deficiency (subclass of CDG)	GPI anchor deficiencies are...	29	9	petkraw		    
New panel						

My Gene Panels		Public Gene Panels				
Select	Name	Description	Number of genes	Followers	Author	Actions
<input type="checkbox"/>	Limb Genes	all genes associated with l...	678	10	sandra.doelken	  
<input type="checkbox"/>	Kingsmore Inherited Disease	Developed in collaboration ...	544	10	TruSight	 
Subscribe						

Select *My GeneTalk* → *Gene Panels* to view,, create edit and share gene panels.

You can subscribe to public gene panels and use them for filtering and to stay up-to-date: Simply check the box in the list of public gene panels and click on *Subscribe*. The gene panel will now be listed in *My Gene Panels*. When a gene panel is modified or commentated, all subscribers to the panel, will be notified.

If you want to create a gene panel, click *New Panel*. Now, you see a dialog for generating a gene panel. You can paste a list of genes or genomic regions in the *Genes* text box and give a short description for your panel. Use a meaningful name for your gene panel, maybe one that indicates the purpose of the panel. Check *Publish for filtering* if you want to allow other users to use your gene panel for filtering. Check *My expertise* if you want to get in contact with other users concerning the genes in your panel.

New Gene Panel

Name

Genes
Enter a collection of Entrez-IDs, Gene Symbols, CCDS-IDs (CCDSxxxx), or regions separated by commas, newline, tab, or blank. Specify regions by (Chrom.Nr.Start.End), e.g. (9, 100000, 200000).

Description

Publish for filtering
Check this box if other GeneTalk users are allowed to use this panel for filtering.

My expertise
Check this box if you want to be listed as an expert for this gene panel.

My level of expertise

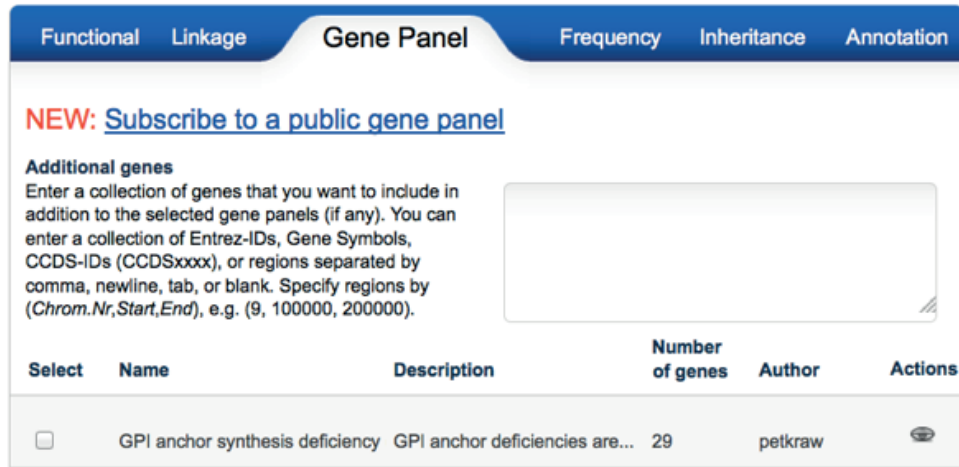
Abstract for expertise
The information about your area of expertise given here are visible to other GeneTalk users. Other GeneTalk users may contact you based on the informations given here. If you do not want other users to see and contact you, just select Do not list me as an expert.

[Create](#) or [Cancel](#)

Filtering with Gene Panels

To filter VCF files for variants in a set of genes that, for example, are associated with a particular disorder use the *Gene Panel* tab in the filter menu. Select one of your – own or subscribed – gene panels. You can also enter one or more genes in the text box.

Set other filter parameters to your need, and click the *Filter* button at the bottom of the page to start the filter process.



Functional Linkage **Gene Panel** Frequency Inheritance Annotation

NEW: [Subscribe to a public gene panel](#)

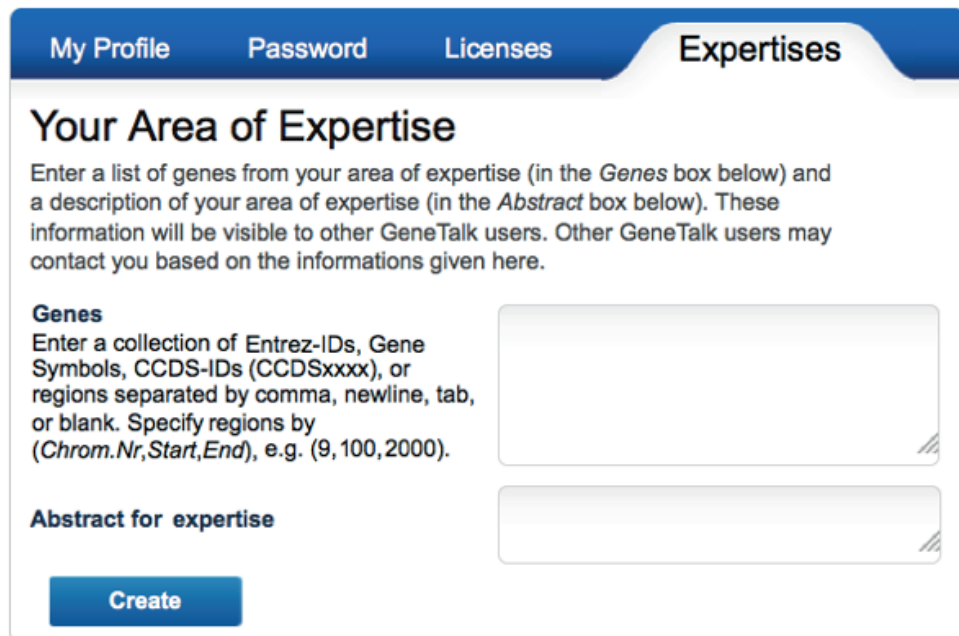
Additional genes
Enter a collection of genes that you want to include in addition to the selected gene panels (if any). You can enter a collection of Entrez-IDs, Gene Symbols, CCDS-IDs (CCDSxxxx), or regions separated by comma, newline, tab, or blank. Specify regions by (Chrom.Nr,Start,End), e.g. (9, 100000, 200000).

Select	Name	Description	Number of genes	Author	Actions
<input type="checkbox"/>	GPI anchor synthesis deficiency	GPI anchor deficiencies are...	29	petkraw	

Your Field of Expertise

If you want other users to contact you, for example, to discuss variants in genes you are interested in, define a set of genes as your expertise. You can state an expert level for every gene panel you created or subscribed (My GeneTalk → Gene Panels → edit icon). You will then be visible to other users, for example, in the annotation list for a variant.

If you do not already have an expert gene panel, open your profile (My GeneTalk → My Profile) and enter a list of genes and a short description in the *Expertises* tab.



My Profile Password Licenses **Expertises**

Your Area of Expertise

Enter a list of genes from your area of expertise (in the *Genes* box below) and a description of your area of expertise (in the *Abstract* box below). These information will be visible to other GeneTalk users. Other GeneTalk users may contact you based on the informations given here.

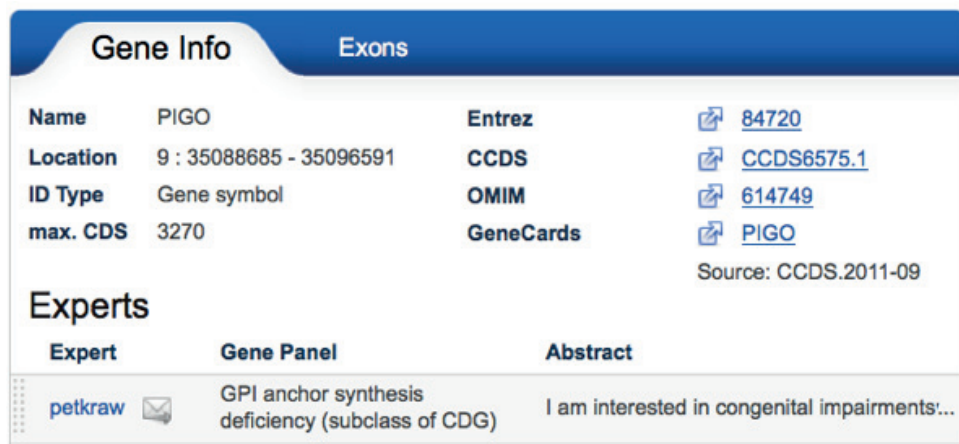
Genes
Enter a collection of Entrez-IDs, Gene Symbols, CCDS-IDs (CCDSxxxx), or regions separated by comma, newline, tab, or blank. Specify regions by (Chrom.Nr,Start,End), e.g. (9,100,2000).

Abstract for expertise

Create

Finding and contacting experts

If you click on a gene name anywhere in GeneTalk (or search for it using *Search GeneTalk* → *Genes*) you will get information about the gene itself, annotations to variants in this gene, and a list of experts. You can contact expert users by clicking on the envelope button next to the user name or – vice versa – others can contact you, if you are listed as an expert for this gene.



Gene Info Exons

Name	PIGO	Entrez	84720
Location	9 : 35088685 - 35096591	CCDS	CCDS6575.1
ID Type	Gene symbol	OMIM	614749
max. CDS	3270	GeneCards	PIGO

Source: CCDS.2011-09

Experts

Expert	Gene Panel	Abstract
petkraw	GPI anchor synthesis deficiency (subclass of CDG)	I am interested in congenital impairments...