

Survey Questions Sep 2019

Introduction

Brief summaries describing the function of each gene's product are of great value to the research community. FlyBase stores a number of gene summaries from different sources (see below).

Summary name	Source	Production	Location in the Gene Report	
Gene Snapshot	FlyBase	Manual (Expert author)	Top of Gene Report	
Gene Group	FlyBase	Manual (Curator) "Summaries" sec		
Pathway	FlyBase	Manual (Curator)	"Summaries" section	
Function Data	UniProt	Manual (Curator)	"Summaries" section	
Phenotypic Description	The Red Book (Lindsley and Zimm, 1992)	Manual	"Summaries" section	
Gene summary	Interactive Fly	Manual	"Summaries" section	
Automated description	Alliance of Genome Resources	Automated algorithm	"Summaries" section	
Automatically Generated Summary	FlyBase	Automated algorithm	"Summaries" section	

This survey is designed to discover how we can improve the display of these gene summaries in the FlyBase Gene Report page.



Automated descriptions from the Alliance of Genome Resources

1. The <u>Alliance of Genome Resources</u> provides automated, standardized human-readable descriptions for most Drosophila genes. FlyBase has recently incorporated these into the "Summaries" section of our Gene Reports.

These Alliance descriptions currently include the following modules (depicted in different colors in the example below for <u>Drosophila Parkin</u>).

- -Functional data (BLUE)
- -Disease associations (GREEN)
- -Human ortholog data (YELLOW).

park

Automated Description

Exhibits protein homodimerization activity; ubiquitin conjugating enzyme binding activity; and ubiquitin protein ligase activity. Involved in several processes, including cellular protein modification process; gamete generation; and regulation of mitochondrion organization. Localizes to the mitochondrion. Used to study Parkinson's disease; autosomal recessive juvenile Parkinson's disease 2; cardiomyopathy; and opportunistic bacterial infectious disease. Human ortholog(s) of this gene implicated in Parkinson's disease; autosomal recessive juvenile Parkinson's disease 2; and ovarian cancer. Orthologous to human PRKN (parkin RBR E3 ubiquitin protein ligase).

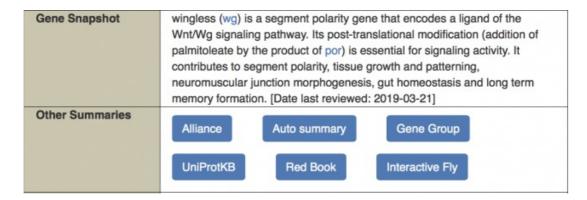
We are wondering if it is best to include the full Alliance automated description or only specific module(s).

Please choose which module(s) we should include in the Alliance automated descriptions shown in FlyBase.
Functional data (BLUE)
Disease associations (GREEN)
Human orthology data (YELLOW)
None



Summaries available in FlyBase

2. Please give us feedback on each type of gene summary available in FlyBase by selecting one of the options below. (Click on the "Other summaries" buttons from the examples below or look at the 'Summaries' section on a Gene Report of your favorite gene).



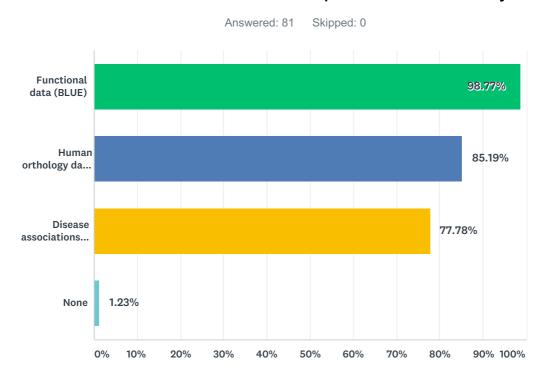
Please provide a rank for each one (1=Most informative / 8=Less informative).

	Did you know about it?	Rank
Gene Snapshot (FlyBase) (see example <u>here</u>)	\Delta	\$
Gene Group (FlyBase) (see example <u>here</u>)	\$	\$
Pathway (FlyBase) (see example <u>here</u>)	\$	\$
Protein Function (UniProtKB) (see example here)	\$	\$
Phenotypic Description from the Red Book (Lindsley and Zimm 1992) (see example <u>here</u>)	•	\$
Gene summary (Interactive Fly) (see example <u>here</u>)	\Delta	•
Automated description (Alliance of Genome Resources) (see example here)	\$	\$
Automatically Generated Summary (FlyBase) (see example		



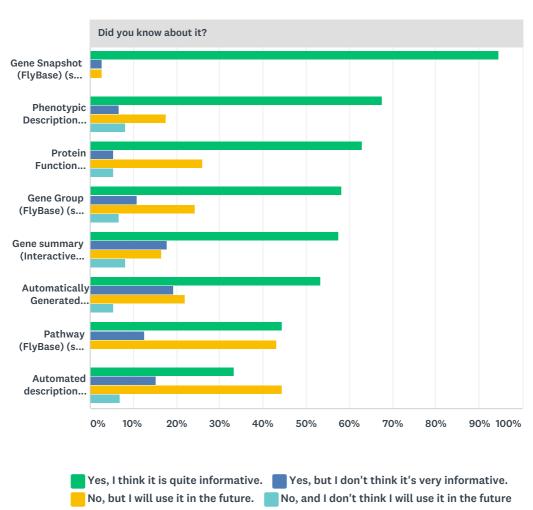
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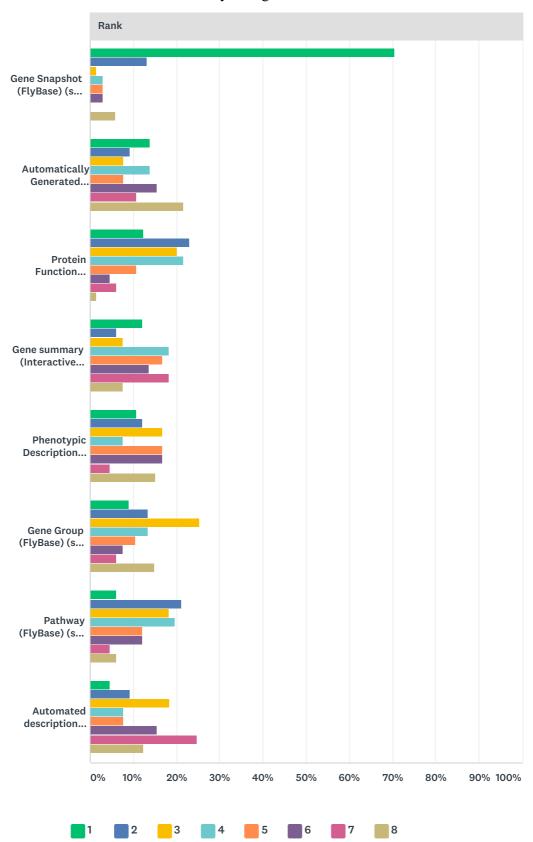
Q1 The Alliance of Genome Resources provides automated, standardized human-readable descriptions for most Drosophila genes. FlyBase has recently incorporated these into the "Summaries" section of our Gene Reports. These Alliance descriptions currently include the following modules (depicted in different colors in the example below for Drosophila Parkin).-Functional data (BLUE)-Disease associations (GREEN)-Human ortholog data (YELLOW). We are wondering if it is best to include the full Alliance automated description or only specific module(s). Please choose which module(s) we should include in the Alliance automated descriptions shown in FlyBase.



ANSWER CHOICES	RESPONSES	
Functional data (BLUE)	98.77%	80
Human orthology data (YELLOW)	85.19%	69
Disease associations (GREEN)	77.78%	63
None	1.23%	1
Total Respondents: 81		

Q2 Please give us feedback on each type of gene summary available in FlyBase by selecting one of the options below. (Click on the "Other summaries" buttons from the examples below or look at the 'Summaries' section on a Gene Report of your favorite gene). Please provide a rank for each one (1=Most informative / 8=Less informative).





Did you know about it?					
	YES, I THINK IT IS QUITE INFORMATIVE.	YES, BUT I DON'T THINK IT'S VERY INFORMATIVE.	NO, BUT I WILL USE IT IN THE FUTURE.	NO, AND I DON'T THINK I WILL USE IT IN THE FUTURE	TOTAL
Gene Snapshot (FlyBase) (see example here)	94.59% 70	2.70% 2	2.70%	0.00%	74
Phenotypic Description from the Red Book (Lindsley and Zimm 1992) (see example here)	67.57% 50	6.76% 5	17.57% 13	8.11% 6	74

Protein Function (UniProtKB) (see example here)	63	3.01% 46		5.48% 4	2	6.03%		5.48%	73
· '									7.0
Gene Group (FlyBase) (see	58.11%			10.81%	24.32%		6.76%		7
example here)	43			8	18		5		74
Gene summary (Interactive Fly)	57	7.53%		17.81%	16.44%		8.22%		
(see example here)		42		13	12		6		73
Automatically Generated Summary (FlyBase) (see example here)	53.42% 39			19.18% 14	21.92% 16		5.48% 4		7:
Pathway (FlyBase) (see example here)	44.44% 32		12.50%	43.06%		0.00%		72	
Automated description (Alliance of Genome Resources) (see example here)	33.33% 24			15.28% 11	44.44%		6.94%		72
Rank									
	1	2	3	4	5	6	7	8	TOTAL
Gene Snapshot (FlyBase) (see example here)	70.59% 48	13.24% 9	1.47% 1	2.94% 2	2.94% 2	2.94% 2	0.00%	5.88% 4	68
Automatically Generated Summary (FlyBase) (see example here)	13.85% 9	9.23% 6	7.69% 5	13.85% 9	7.69% 5	15.38% 10	10.77% 7	21.54% 14	65
Protein Function (UniProtKB) (see example here)	12.31% 8	23.08% 15	20.00% 13	21.54% 14	10.77% 7	4.62% 3	6.15% 4	1.54% 1	6
Gene summary (Interactive Fly) (see example here)	12.12% 8	6.06% 4	7.58% 5	18.18% 12	16.67% 11	13.64% 9	18.18% 12	7.58% 5	66
Phenotypic Description from the Red Book (Lindsley and Zimm 1992) (see example here)	10.61% 7	12.12% 8	16.67% 11	7.58% 5	16.67% 11	16.67% 11	4.55% 3	15.15% 10	60
Gene Group (FlyBase) (see example here)	8.96% 6	13.43% 9	25.37% 17	13.43% 9	10.45% 7	7.46% 5	5.97% 4	14.93% 10	6
Pathway (FlyBase) (see example here)	6.06% 4	21.21% 14	18.18% 12	19.70% 13	12.12% 8	12.12% 8	4.55% 3	6.06% 4	60
Automated description (Alliance of Genome Resources) (see example here)	4.62%	9.23%	18.46% 12	7.69% 5	7.69% 5	15.38% 10	24.62% 16	12.31%	65

Q3 Please give any additional comments about the gene summaries available in FlyBase below.

Answered: 14 Skipped: 67