

Python Examples Accessing SGD API

<http://bit.ly/apiexamples>

```
1  import requests
2
3  SGD_BASE_URL = 'https://www.yeastgenome.org/webservice'
4
5  def print_phenotype_loci():
6      url = SGD_BASE_URL + '/phenotype/abnormal_mating_response/locus_details'
7      response = requests.get(url=url).json()
8      print('LOCI ANNOTATED TO abnormal_mating_response')
9      for annotation in response:
10         gene_name = annotation['locus']['display_name']
11         reference_citation = annotation['reference']['display_name']
12         print(gene_name + ', reference citation:' + reference_citation)
13
14  if __name__ == '__main__':
15      print_phenotype_loci()
```

```
1  import requests
2
3  SGD_BASE_URL = 'https://www.yeastgenome.org/webservice'
4
5  def print_chromosome_i_sequences():
6      url = SGD_BASE_URL + '/contig/chromosome_i/sequence_details'
7      response = requests.get(url=url).json()
8      for locus in response['genomic_dna']:
9          name = locus['locus']['display_name']
10         sequence = locus['residues']
11         print(name + ': ' + sequence)
12
13  if __name__ == '__main__':
14      print_chromosome_i_sequences()
```

```
1  import requests
2
3  SGD_BASE_URL = 'https://www.yeastgenome.org/webservice'
4
5  def print_act1_info():
6      url = SGD_BASE_URL + '/locus/act1'
7      response = requests.get(url=url).json()
8      # print references
9      print('ACT1 REFERENCES')
10     for ref in response['references']:
11         name = ref['display_name']
12         pmid = str(ref['pubmed_id'])
13         print(pmid + ': ' + name)
14     # print large scale phenotypes
15     print('ACT1 OVEREXPRESSION LARGE SCALE PHENOTYPES')
16     for pheno in response['phenotype_overview']['large_scale_phenotypes']['overexpression']:
17         name = pheno['display_name']
18         print(name)
19
20  if __name__ == '__main__':
21      print_act1_info()
```