

# Knowledgebase Access

## mySQL setup

```
sudo apt-get install mysql-server
sudo apt-get install mysql-workbench
```

## Login to database

```
mysql --user=root mysql --password=<pw>
```

## Create user

```
CREATE USER 'mkoenig'@'localhost' IDENTIFIED BY 'test';
GRANT ALL PRIVILEGES ON *.* TO 'mkoenig'@'localhost' WITH GRANT OPTION;
```

## Test access

```
mysql -u mkoenig -p -h localhost wholecellkb
```

## Create database

```
CREATE DATABASE wholecellkb DEFAULT CHARACTER SET utf8 DEFAULT COLLATE
utf8_unicode_ci;
DROP DATABASE wholecellkb
```

## Django setup

```
sudo pip install django django-haystack xapian-haystack django-extensions
sudo pip install lxml2pdf httpplib2 nose pisa hashlib huTools BeautifulSoup docutils
epydoc
sudo apt-get install python-biopython
sudo pip install odict
```

## Code

<https://github.com/dagwa/wholecell-metabolism/mkoenig/python/database>

## Path settings bash.bashrc

```
export
PYTHONPATH=${PYTHONPATH}:/home/mkoenig/wholecell-metabolism/mkoenig/python/database/
export
PYTHONPATH=${PYTHONPATH}:/home/mkoenig/wholecell-metabolism/mkoenig/python/database/wh
olecellkb
export
PYTHONPATH=${PYTHONPATH}:/home/mkoenig/wholecell-metabolism/mkoenig/python/database/pu
blic
export DJANGO_SETTINGS_MODULE=wholecellkb.settings
```

## Create Django DB schema

```
python manage.py syncdb
```

## Import MySQL dump

[https://simtk.org/frs/download.php?file\\_id=3426](https://simtk.org/frs/download.php?file_id=3426)

```
mysql -u mkoenig -p test -h localhost wholecellkb < data.sql
```

Can be necessary to import the SQL manually

## Edit database settings `database/settings.py`

- DATABASES: edit host, user, password

## Examples

```
from public.models import Metabolite, Reaction, Gene
```

```
# print some metabolites
metabolites = Metabolite.objects.all()[:10]
for m in metabolites:
    print m.pk, m.name, m.charge
# find some reactions
Reaction.objects.filter(name__startswith='A')
# find some genes
Gene.objects.filter(name__contains="2")
```