Access to Karr knowledgebase

The knowledgebase for the Karr provides and object-relational mapping which can be accessed via Django

Replace in the following commands

```
mkoenig -> <user>
test -> <password>
```

mySQL setup

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

Login to database

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

Create user in mysql

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

Create database

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

Test wholecellkb access

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

Django setup

```
sudo pip install django==1.6.8
sudo pip install django-haystack xapian-haystack django-extensions
sudo pip install xhtml2pdf httplib2 nose pisa hashlib huTools BeautifulSoup docutils
epydoc odict
```

```
sudo pip install biopython
```
xapian-haystack ???

Code
Checkout the git. Important parts are the python/database folder and schema folder
https://github.com/dagwa/wholecell-metabolism/mkoenig/python/database

Path settings in `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 in the django subfolder
```
python manage.py syncdb
```

Import MySQL dump
Download the SQL dump (data.sql)
https://simtk.org/frs/download.php?file_id=3426
which is also available in the data subfolder of the git

```
mysql -u mkoenig -p test -h localhost wholecellkb < data.sql
```
Can be necessary to run the SQL statement manually, for instance via mysql-workbench
```
mysql-workbench
```

Edit database settings `database/settings.py`
• `DATABASES: edit host, user, password`

Overview database schema

Overview of tables and relationships for navigation between table in subfolder. Highly
recommended to look at this (you can click on the tables to follow the relationships)
`/schema/index.html`