½ Day "Hands on Workshop on *Proteopedia*"
A Powerful Tool for Biomolecular Communication
and a 3D Web Encyclopedia of Biomolecules

Scientists and students are now able to access 3D images of biomacromolecules underlying biological functions and disease. Rather than relying on text and 2D images to try to understand the function of these structures, a collaborative website called *Proteopedia*[1,2] provides a new resource by linking written information and 3D structural information. The *Proteopedia* wiki web resource, **http://proteopedia.org**, displays protein structures and other biomacromolecules in an interactive format. To use *Proteopedia*, **Java must be enabled** on your PC, MAC or Linux computer. The interactive images on each page are surrounded by descriptive text containing hyperlinks that change the appearance (such as view, representations, colors or labels) of the adjacent 3D structure to reflect the concept discussed in the text.

This hands on workshop will focus on:

- How to browse the > 95,000 pages in *Proteopedia*, *e.g.*
    - **http://proteopedia.org/w/HIV-1_protease**
    - **http://proteopedia.org/w/Ribosome**
    - **http://proteopedia.org/w/Group:SMART:A_Physical_Model_of_the_β2-Adrenergic_Receptor**
- How to create your own pages in *Proteopedia*[3,4], including
    - Adding 3D interactive scenes via a user friendly GUI for Jmol
    - Adding text to *Proteopedia* pages, with hyperlinks to the interactive scenes.

References:

1. Hodis, E., Prilusky, J., Martz, E., Silman, I., Moult, J. & Sussman, J. L. (2008). Proteopedia - a scientific 'wiki' bridging the rift between 3D structure and function of biomacromolecules. *Genome Biol* **9**, R121.

2. Prilusky, J., Hodis, E., Canner, D., Decatur, W. A., Oberholser, K., Martz, E., Berchanski, A., Harel, M. & Sussman, J. L. (2011). Proteopedia: A status report on the collaborative, 3D web-encyclopedia of proteins and other biomolecules. *J Struct Biol* **175**, 244-252.

3. *Proteopedia* help pages: **http://proteopedia.org/w/Help:Contents**

4. *Proteopedia* Video Guide: Several narrated videos to guide you through using *Proteopedia*: **http://proteopedia.org/w/Proteopedia:Video_Guide**