Subject:

NBIS Data Management Gym – Learn and train data handling techniques

Body:

Do you generate a lot of data and would like to learn new tools or an alternative approach to handle it? Maybe you just want a forum to discuss your data problems, or a place to hone your skills by trying different data managing techniques. If this is the case, you should read on.

I will like to announce a new NBIS training activity in Gothenburg named the **Data Management Gym**.

The National Bioinformatics Infrastructure in Sweden (NBIS) is a distributed infrastructure, supporting life sciences in Sweden. NBIS staff are involved in many training activities, ranging from participation in advanced bioinformatics courses, graduate student courses and similar to individual training of researchers in order to teach them new bioinformatics tools and to help them utilise bioinformatics tools more efficiently. The training activities are also an efficient way to increase the flow of projects through the NBIS organisation by helping scientists to be able to perform parts of the bioinformatics analyses themselves. For more information, please visit our website at nbis.se.

It is an exciting time to do research in life sciences. Current advances in modern science allow researchers to measure our world in ever more detail, boosting our capacity of knowledge discovery. These advances bring new challenges; the need to manage a growing collection of acquired data that needs to be stored, processed and analysed. With this growing complexity, conventional tools (like worksheets) are not enough. Researchers may find themselves spending precious time managing their data rather than analysing it, or doing activities that are more valuable. This data-handling problem can be resolved by outsourcing it to service providers like NBIS, hiring your own technical staff or by training your local people.

The Data Management Gym (DM Gym) is a prototype NBIS initiative, aimed at training researchers to manage their own data. The training will not take the form of conventional courses or workshops, which require a strong time commitment not everyone can afford. As the name suggest (DM Gym), we will offer a regular space where people can gather to train and hone their data handling skills.

You can expect two hour sessions in a bi-weekly manner. We will try to cover different approaches of learning new tools. For example, for the less technically inclined, we will have hands-on sessions, where you will learn new tools or techniques by a “follow the recipe” approach. At the end of such a session, the participant should be able to reuse the recipe to handle their data, with only a basic understanding of the technique (like a black box). Other sessions will focus on discussing the data problems we are currently facing, and pitch ideas and solutions for them. Other sessions will be a deep dive into the technologies or techniques we previously learned (opening the back box). We will announce in advance a specific topic, tool or problem we will cover and you can decide if it is of interest to your or not. You can of course send us suggestions and we can try to include them.

Concretely, we will like to cover subjects like relational and graph databases, using different frameworks to manage your data, like Windows .net, R, or Unix. We will have invited guests give talks like “Data Management in the Life Sciences” and open forums to discuss our data problems.

If you are interested, please contact: [luciano.fernandez@bils.se](mailto:luciano.fernandez@bils.se) subject: DM Gym

**First DM Gym meeting:**  
**Date**: Friday 3 of March  
**Time**: 10.00-12.00  
**Location**: Botanical Institute  
**Theme**: By popular demand, we will start with how can we use, the under looked, power of windows .net (dot-net) tools to store (persist) your data in a database, and ways to query, process and export it. We will focus on techniques were no experience with databases is required, as we will use an object-oriented programming (OOP) approach to designing and handling our data. In other words, we will deal with “entities” that feel and behave like your data and not some abstract database concept like tables, rows and columns. This session aims at people without specific technical skills that are willing to try a follow-the-recipe/protocol/black-box approach. At the end of one or two sessions, you will be able to design a repository for your data, and import it into your database (without having database training). You will also be able to query and display the data. Finally, you will be able to save processed data into text files.

/NBIS team in Gothenburg