# Producing a Figure for Publication Practical (v2.1)

## Introduction

In this practical we will produce figures from data using Microsoft Excel. Using these figures we will then further explore data representation theory.

## Software

This practical and the instructions are based on Microsoft Excel 2010, GIMP v.2.8.10 and Inkscape v0.91 (although they should be very similar on other versions).

- GIMP (www.gimp.org)
- Inkscape (https://inkscape.org)

## Data

All of the input data used in this practical can be downloaded from the Babraham Bioinformatics web site (http://www.bioinformatics.babraham.ac.uk/training.html).

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The data used in this practical are from an experiment, regarding different diets and the corresponding levels of cholesterol in pigs and sheep. We want to compose our data into a single figure for publication.

## Exercise 1 - GIMP

Open the 'Fat deposits.tif' file in GIMP, check brightness and contrast using levels and save as a PNG file.

## Exercise 2a – Importing/Editting PDF's in Inkscape

Import the PDF file 'FinalPrac.pdf' into Inkscape. Change the colour of the bar chart so that the figure would work in black and white and make any other adjustments you think would make this figure clearer. Remember to save working copies of your files (in an appropriate format).

## Exercise 2b – Inkscape

In Inkscape make schematic illustrations of a pig and a sheep to illustrate the animal models used in the experiment. Draw the images, don't cheat!

## Exercise 3 – Figure composition

Finally compose your Inkscape drawing, the two plots from the PDF files and the microscope image into a single figure. Remember to check alignment and size.

Export your final figure in an appropriate format.