LUNCHTIME SCIENCE TALK

You are welcome to attend these monthly Lunchtime Science Talks organized by the Faculty of Science. These talks aim to provide a general introduction to important areas of scientific research and are suitable for both researchers and undergraduates. They will be given by prominent Faculty of Science staff who have won recognition for their work or who have been recently promoted.

SPEAKER	Assoc Prof Yap Von Bing Department of Statistics & Applied Probability
TOPIC	How to sample humans, animals, plants, and "fossils"
DATE	31 March 2011 (Thursday)
TIME	12 to 1 pm
VENUE	LT31, Block S16, Level 3, National University of Singapore
ABSTRACT	

Many ecological studies aim to characterize a population with a sample, hence can benefit greatly from lessons learnt over a century's surveys. These issues will be illustrated with past US presidential elections, and placed in the ecological context. A recent study of a horseshoe crab habitat in Singapore will be described in detail, focusing on the sampling strategy. We will also discuss concrete examples of using the two-sample statistical test to answer scientific questions; these have three flavours: (a) test is justified, and question is readily interpretable, (b) test is justified, but question is not so interpretable, (c) test is not justified. This talk is pitched at the level of budding ecologists (ideally before their fascinating field activities), but the general ideas can be interesting to a wider audience. Recommendations will be given on balancing sound presentation of numerical data with the pressure to produce respectable-looking statistics.

BIOGRAPHY

Yap Von Bing has degrees in Mathematics, Applied Mathematics and Statistics. His research interest is the application of statistics to biological problems, in particular DNA evolution and genomics. The effective teaching of statistics is another pursuit that has gained substantially from numerous consultations for colleagues, mostly from the Faculty of Science.