**Department of Mathematics**

THE UNIVERSITY OF AUCKLAND
NEW ZEALAND
Te Whare Wānanga o Tāmaki Makaurau

# Mathematics may be the Queen, but Biology is her intimate friend

## A Public Lecture by Professor James Sneyd

**Lecture Time……7pm**
**Refreshments……6.30pm**
**Date……Thursday 15 December 2005**
**Place……..Lecture Theatre PLT1, Science Centre**
**Building 303, 38 Princes Street,**
**The University of Auckland**

**ABSTRACT:**
Although the mathematician Gauss once said "Mathematics is the Queen of the Sciences", not even he could have predicted how Biology would grow to be one of the most important areas of modern Applied Mathematics.

In this lecture we will go on a short tour of Mathematical Biology. From historical studies of smallpox, to the theory of how we hear, from the mathematical theory of how neurons work, to the study of genetics and evolution, I shall describe some of my favourite ways in which Mathematics and Biology can be such close friends.

**PROFESSOR A. JAMES SNEYD:**
James Sneyd is a Professor of Applied Mathematics at the University of Auckland, and is one of the most recent Auckland faculty members to be elected as a Fellow of the Royal Society of New Zealand. One of the world's leading mathematical biologists, his international reputation rests on his basic research into pattern formation and self-organisation in biological systems, and a study of the dynamics of calcium signalling in a variety of cell types. He is probably most widely known for his influential research-based textbooks, Self-Organization in Biological Systems (2001) and Mathematical Physiology (1998), both of which have won Best Book awards from the American Association of Publishers.

**FURTHER INFORMATION:**
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