



Unit GR05, Brookside Office Park, 11 Lansdowne Road, Claremont, 7700  
Tel: + 27 21 683 5814 | Fax: +27 21 674 6328 | [www.africagenome.com](http://www.africagenome.com)

## NEWSLETTER Issue # 3

### SWINE FLU - THE 2009 PANDEMIC: A PARADIGM OF BIOLOGICAL EVOLUTION IN ACTION

The year 2009, the bicentenary of the birth of Charles Darwin, also marks the formal declaration of the first pandemic of influenza this century. The influenza virus, one of the most enigmatic of all human viruses, is a perfect model of real-time evolutionary adaptation to selective pressures. Utilizing a variety of mechanisms for genetic mobility the influenza virus has been highly successful in propagating itself in human populations thereby causing a very substantial burden of illness. The latest pandemic, due to a virus colloquially referred to as "swine flu", has arisen as a result of the incorporation of genetic elements from pig, avian and human influenza viruses. Aided by modern air travel it has rapidly spread throughout the world - what took the Spanish Influenza Pandemic of 1918 some 6 months to spread around the world, swine influenza has accomplished in less than six weeks. One can speculate on the future course of this pandemic by reviewing past pandemics which have some common features but also some very distinctive differences.

\*An abstract of the forthcoming **Darwin Lecture** by **Prof Barry D Schoub MD DSc FRCPath** (see the **Events** notice below).

#### SEEDS BIDS FAREWELL TO CORNELIUS HACKING

On Friday, 26 June, the SEEDS steering committee bid a sad farewell to Cornelius Hacking, 1<sup>st</sup> Secretary of the Embassy of the Kingdom of the Netherlands and initiator of this very significant collaboration in education.

The SEEDS (Systemic Education and Extramural Development and Support) collaborative initiative in the Western Cape that involves 9 partner organisations in 4 key focus areas of education was borne from Cornelius' experiences in the Far East. Believing in the maxim that the whole is greater than the sum of its parts, Cornelius encouraged the partner organisations to collaborate in presenting a joint proposal to him for consideration. After some 18 months of development, the R150million, 4-year proposal was submitted by Stellenbosch University (the fundholder) and accepted by the Embassy.

The nine partner organisations, including AGEI, learners, teachers and officials in the Western Cape all owe Cornelius Hacking an enormous debt of gratitude for his vision and commitment to enhancing education service provision in the province. To Cornelius we say "hamba kakhulu, baie dankie, and enkosi kakhulu" as we wish him and his family all of the best as they return to Europe.

#### TEACHING BIOLOGY PROJECT (TBP)

All the TBP staff are very involved in preparing for the second Evolutionary Biology workshop, which runs from the 13-16 July at Bishops in Rondebosch. This workshop is oversubscribed and promises to be even more exciting than the first workshop held in April.

The TBP website will be launched during this workshop and will include resources that may be accessed only by teachers who have attended a TBP conference, a discussion page and an "Ask an Expert" section. If you are willing to act as an expert on aspects of evolutionary biology please contact Cheryl Douglas at [cdouglas@bishops.org.za](mailto:cdouglas@bishops.org.za) and questions will be directed to you.



[www.teachingbiologyproject.org.za](http://www.teachingbiologyproject.org.za)

#### SWINE FLU AND THE DANGER FOR GLOBAL HEALTH by Gavin Chait

In one of my first immunology classes at university, we played a game called Pandemic. [Read more...](#)

<http://www.africagenome.com/>

#### THE DARWIN TRAIL

You will be able to retrace the route that Charles Darwin followed when he visited Cape Town aboard the HMS Beagle.

Darwin arrived in Simon's Town on 31 May and left on 14 June 1836. The Darwin Trail will map out this historic but, until recently, poorly documented visit and reclaim it as part of South African history.

Watch this space for further details!

#### EVENTS

##### DARWIN SEMINAR

**"Swine Flu – the pandemic threat: a paradigm of biological evolution in action"**

By Prof Barry Schoub  
Executive Director for the National Institute for Communicable Diseases

Date : Thursday 23 July 2009  
Time : 5:30pm for 6:00pm  
Venue: New Learning Centre,  
Health Sciences Campus, UCT, Anzio Road, Observatory

RSVP: Linet at 021 557 0246  
[linet@hippocommunications.com](mailto:linet@hippocommunications.com)

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