

# International Development Fund report

## The 3rd Workshop in Molecular Biology and its Application to Disease *10–15 January 2000, The Centre for Tropical Diseases, Ho Chi Minh City, Vietnam*

■ Simon Cutting

The workshop, sponsored by the Society for General Microbiology and consisting of 6 days of practicals and lectures, was held at the foremost centre in the South of Vietnam for the treatment of tropical disease. This site of a Wellcome Trust overseas unit is directed by Dr Jeremy Farrar (University of Oxford) who co-organized the course with Dr Simon Cutting (Royal Holloway University of London) as part of an initiative to train Vietnamese staff in contemporary techniques in molecular biology. Twelve European scientists contributed to the workshop which was attended by 20 students.

The 5-hour practical sessions, organized by Dr Marita Pohlschmidt, introduced the molecular techniques required to diagnose inherited genetic markers such as cystic fibrosis: PCR, restriction digestion, gel electrophoresis and Southern blotting. While the objectives of mutation analysis may appear advanced for use in a developing country, this technology is already beginning to be applied in Vietnam and some students present at the workshop are about to set up a lab for diagnosis of inherited diseases at the Ho Chi Minh City (HCMC) University of Medicine and Pharmacy. A second and parallel course introduced Bioinformatics to groups of 10 students. Internet access is now readily available in Vietnam and this was the first bioinformatics workshop to be held in the country.

In addition to the practical labs, mornings were taken up by a series of lectures and small group discussions where specific questions relating to the lectures were



ABOVE:  
The mountains of North Vietnam.

BELOW:  
Practical skills being demonstrated to Vietnamese participants.

PHOTOS COURTESY S. CUTTING



TOP RIGHT:  
Group photo of the participants  
in the 3rd Workshop in *Molecular  
Biology and its Application to  
Disease* at the Centre for Tropical  
Diseases, Ho Chi Minh City,  
Vietnam.



CENTRE RIGHT:  
Workshop participants in a  
bioinformatics lab.



LOWER FAR RIGHT:  
Nha-Trang, Vietnam.

PHOTOS COURTESY S. CUTTING

One of the highlights of the workshop was a banquet held on the Saigon river involving all participants and staff accompanied by traditional Vietnamese music.

The significance of these workshops may, for those who are unfamiliar to Vietnam, be difficult to assess. However, they are of vital importance and there is real demand for Western technology. This is a result of years of isolation from developed countries and numerous opportunities now exist for collaboration and development in Vietnam which has a strong background in academia (originating from the French). Techniques in molecular biology are now being applied for their own benefit. One topical example is the development of a potential new oral cholera vaccine which has undergone phase III trials in Vietnam.

The European staff were: Dr Simon Cutting (Royal Holloway University of London, RHUL), Dr Marita Pohlschmidt (RHUL), Dr Ian Graham (RHUL), Professor Robert Glass (University of Nottingham), Dr Neil Fairweather (Imperial College, London), Professor Wolfgang Schumann (University of Bayreuth, Germany), Dr Philippe Bouloc (Université Paris-Sud, France), Dr Alexandra Gruss (INRA, Jouy en Josas, France), Angelo Pantelides (RHUL), Gabriella Casula (RHUL), Ro Prajapati (RHUL) and Ngo Thi Hoa (RHUL).

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addressed in greater detail. These tutorials where students could speak in depth to established scientists were highly appreciated. Lecture topics included gene expression, basic molecular biology techniques and infectious diseases relevant to Vietnam. The lectures were attended by the practical participants as well as interested scientists from HCMC, making the turnout about 40–50 each morning. Although students spoke English and the 45-minute lectures were given in English, they were translated into Vietnamese making the total time per lecture almost 90 minutes!

