

tropical



Royal opening of CTID

2008-2009 issue

Director's Update

LSTM Director Professor Janet Hemingway



In March 2008 we moved around 120 staff into our new building. The state of the art Category III space in the Centre for Tropical and Infectious Diseases (CTID) building allows us to safely handle a number of pathogens and infected insects in a way that was not possible in our old facilities, allowing us to expand the breadth of our work in search of new treatments and solutions to some of the world's most devastating tropical diseases.

The space freed up by moving approximately a third of our staff to CTID is now scheduled for much needed renovation, and provides us with the opportunity to expand our existing activities and bring in new senior staff. We have

already made three new senior appointments. Sue Assinder has joined us as our Director of Education, while Joe Valadez and Moses Bockarie have joined us to strengthen our International Health and Disease Control Strategy Groups respectively. Stewart Tyson has been appointed as new Managing Director of Liverpool Associates in Tropical Health (LATH Ltd), our technical assistance company, and we look forward to welcoming him to Liverpool in the autumn.

Our research programme continues to build with several major programmes funded recently by the Wellcome Trust. One of these will allow us to validate a novel target site for drug development. Our successful relationship with the Bill and Melinda Gates Foundation continues to develop, the latest

example being the Malaria in Pregnancy (MiP) Consortium, established in March 2008 with an initial grant of \$30 million.

LATH has also generated major new business in Malawi, with an exciting initiative funded by the UK's Department for International Development that will allow us to help Malawi realise the benefits of applied research occurring in-country and integrate these, where appropriate, into its policy and planning activities within the Ministry of Health.

In an otherwise upbeat year the only cloud on our horizon is our ability to continue to access HEFCE (Higher Education Funding Council for England) funding. Changes in HEFCE's accounting requirements mean that the affiliation with the University of Liverpool, which has benefitted both Institutions for over one hundred years, no longer appears viable in its current format. HEFCE is currently funding a consultant to look at this issue.

We look forward to your continued support throughout the coming year as we continue to expand and develop the ways in which we can improve the health and wellbeing of those most in need.

CTID was officially opened by our Patron, HRH The Princess Royal on 18 July. You can read more about this landmark occasion in the centre pages.



New Developments in Education

New Director of Education

Dr Sue Assinder has been appointed to the new post of Director of Education. Sue's previous role was as Director of the Academic Development Unit at Bangor University, where she was responsible for delivering professional development in teaching and learning. Prior to this, she was a senior lecturer in the University's School of Biological Sciences, before becoming Head in 2003. Sue has extensive experience of quality assurance and curriculum development both at Bangor and with the Quality Assurance Agency and sits on the Advisory Board of the Higher Education Academy Centre for Bioscience. One of her special interests is promoting public engagement with science and she won the Biotechnology and Biological Sciences Research Council Science Communicator award in 1995 and is currently Education Officer of the Society for General Microbiology and Chair of the Education Committee of the Biosciences Federation.



Commenting on the appointment, LSTM's Director Professor Janet Hemingway, said: "Sue joins us at a very exciting time for learning and teaching. Her wide experience and obvious passion for delivering a student experience of the highest quality will take our learning offer to the next level."

Anticipating the challenge of her new role, Sue said: "I am delighted to be joining such an internationally renowned organisation and look forward to playing my part in establishing LSTM as an international leader in education. The successful introduction of modular courses, the growth in demand for short courses and the possibilities for external teaching show LSTM's strengths in quality academic provision. I am very much looking forward to working with colleagues to develop and implement a new Learning, Teaching and Assessment strategy which will guide our learning and teaching portfolio over the next decade."

New Modular Programmes

In September 2007, LSTM introduced a new modular framework for all Masters programmes. This provides students with a wider choice from a greater variety of modules on offer. As part of this process we have created a new Masters in Tropical

& Infectious Diseases which replaces the Masters in Tropical Medicine.

Masters in International Public Health

Introduced in September 2007, the Masters in International Public Health replaced the Masters of Community Health and has already proved extremely popular. The programme's key aim is to enable graduates to provide leadership in public health in middle and low income countries.

Masters in International Sexual & Reproductive Health

Running from September 2008, this one year Masters programme is being delivered in partnership with the Division of Perinatal and Reproductive Medicine in the School of Reproductive and Developmental Medicine of the University of Liverpool and the Royal College of Obstetricians and Gynaecologists. The programme explores Maternal and Neonatal Health, Family Planning, prevention, diagnosis and management of STIs and HIV infection, adolescent health, gender and gender-based violence.

Masters in Health Care Management

We intend to introduce this Masters programme in September 2009, please visit the website for updates on the status of this programme.

Short Course in International Health Consultancy

Stemming from the work of LSTM's consultancy arm LATH, this short course is designed to equip those intending to pursue national, regional and international health consultancy. The aims of the course are to enhance knowledge and skills in the provision and management of consultancy services within the context of international health and deliver work that is robust, evidence-based and grounded in the reality of resource-poor settings.

Travel Expedition Medicine Course

Building upon LSTM's long history in the field of travel medicine, a short course has been developed focusing on travel health and expedition medicine. The course is particularly relevant to health professionals who may be advising travellers or those who may be considering working as expedition medics.

Fundraising for Humanitarian and Development Organisations (new module)

With increasing competition for scarce resources and growing demands for agencies to respond to the changing priorities of donors, it has never been more vital for those working in NGOs to develop and enhance their fundraising skills. 'Fundraising for Humanitarian and Development Organisations' is designed to meet these challenges and equip participants with both the theory and practical skills required to generate vital income for their organisations. This module, which is offered as part of the MSc in Humanitarian Programme Management, is also available as a 'stand alone' module. It will be run on selected Fridays in Semester 2, making it readily accessible to external participants who are working with UK based NGOs.

Details of these new education programmes and the range of Masters, Certificates, Diploma and short courses available at LSTM can be found on our website at www.liv.ac.uk/lstm/learning_teaching/index.htm

Working Together to Save Lives...

LSTM's success as a centre of excellence in tropical medicine and international health is based around creating and sustaining successful partnerships which bring unique expertise, technology and resources

together to achieve progress and deliver results which would be impossible working in isolation. LSTM's integrated and seamless 'full service' proposition encompassing research, project management and support services is

proving increasingly attractive to grant funders keen to see results as quickly as possible.

...in partnership with global industry

Vector borne diseases are one of the major causes of death in developing countries and keep poor people poor through disability, death of principal earners and missed educational opportunities. LSTM is one of five leading institutions in the field of vector control products and information systems which make up the Innovative Vector Control Consortium (IVCC). The IVCC is developing new and better ways to control insect carriers of disease, including new insecticides and indoor residual sprays, and is currently partnering in projects with Bayer and Syngenta. Commenting on the emerging partnerships with the agrochemical industry, Dr Tom McLean, IVCC's Senior Executive Officer said: "It seems we have touched a deep vein of desire to put their profound expertise to good use in the cause of public health."



Image courtesy of Syngenta

...in partnership with academic and international health organisations



Malaria in pregnancy is a major cause of severe maternal anaemia and preventable low birth weight in infants, which greatly increases the risk of death. In Africa its complications are responsible for as many as 100,000 infants dying needlessly every year.

The Malaria in Pregnancy Consortium is led by LSTM and is comprised of 40 partner institutions in 28 countries around the world, joined in the fight against malaria in pregnancy and committed to improving its control and treatment. This five year programme of research will evaluate new and existing interventions for the prevention and treatment of malaria in pregnancy. It is funded by an initial \$30 million grant from the Bill and Melinda Gates Foundation and is also supported by the European Union.

Ntcheu Health Centre. Photo credit: University of North Carolina

...in partnership with Ministries of Health and NGOs



The 'Addressing the Balance of Burden in AIDS' Research Programme Consortium (ABBA RPC) is helping the UK's Department for International Development drive forward its strategy for assisting countries to tackle HIV and AIDS. The consortium is managed by LSTM from Liverpool and its goal is to improve the effectiveness of efforts to reduce poverty and to achieve the Millennium Development Goals by reducing vulnerability from HIV status. The RPC works with Ministries of Health and NGOs

to improve use of evidence by policy makers, local programme implementers, representatives of vulnerable groups and researchers so that better policies and programmes can be implemented for improving benefit to the poor and the vulnerable. ABBA RPC currently covers Ghana, Nigeria, Kenya, South Africa, Malawi, Swaziland and Uganda.

Left: Children take time for play at an HIV/AIDS Project in KwaZulu Natal, Durban, South Africa.

...in partnerships to deliver humanitarian training

LSTM runs three programmes and a short course aimed at developing the skills of people working in or intending to work in humanitarian situations.

The Masters in Humanitarian Programme Management investigates current approaches to humanitarian programme management and developing models of good practice. The programme is delivered in partnership with Bioforce Development Institute and MANGO (Management Accounting for Non Governmental Organisations). Bioforce, based in France, is an international centre of excellence for professional training and human resources management, specialising in logistics, administration and project management. MANGO is a UK charity established to strengthen the financial management of NGOs and is a partner in the delivery of the Masters in Humanitarian Studies. This course reviews policies and practice in humanitarian assistance and analyses the effect of war, natural disasters and the international economy on social dislocation. The programme investigates the evidence base for current operational guidelines and explores novel approaches in responding to today's humanitarian challenges.

Fundraising for Humanitarian and Development Organisations is a module designed to enhance the fundraising skills of NGO workers. Offered as part of the Humanitarian Programme Management MSc, it is also available as a 'stand alone' module accessible to external participants working with UK based NGOs.

LSTM's Diploma in Humanitarian Assistance (DHA) is an innovative, multidisciplinary training programme for

humanitarian workers engaged in emergency relief and development. The University of Liverpool's School of Politics and Communication Studies brings expertise on the political aspects of complex emergencies, sustainable development, political and ethnic violence and the role and responsibilities of the media in humanitarian interventions.

The School of Law has an international reputation in providing specialist training in the Law of War and International Humanitarian Law. Bioforce bring specialist training in international aid particularly adapted to the needs of professionals in the field including logistics, administration, project management, vehicle fleet management, water and sanitation.

MANGO provides practical financial management training for NGO staff working in development and humanitarian aid.

Experts from Merlin, MSF, Oxfam, Save the Children (UK) and other leading NGOs and international organisations also contribute to the DHA faculty.

Former DHA student Ivor Morgan, working with MedAir



LFSC becomes Centre for Neglected Tropical Diseases

WHAT IS A 'NEGLECTED' TROPICAL DISEASE?

Neglected tropical diseases (NTDs) are medically diverse. Typically, a neglected tropical disease is a chronic parasitic infection that is symptomatic of poverty and neglect. According to the World Health Organization, a neglected tropical disease affects the poorest of populations often living in remote, rural areas, urban slums or in conflict zones. With little political voice, NTD sufferers have a low profile and status in public health priorities. Lack of reliable statistics and unpronounceable names of diseases have all hampered efforts to bring them out of the shadows. NTDs, in comparison to malaria, HIV/AIDS and TB, receive less attention and less funding to address their needs. Some NTDs could, with minimal funding (sometimes as low as 1p per tablet), be either eliminated or controlled and thereby have a major impact on the health and wellbeing of communities.

Below: Queue for Doxycyclene treatment in Cameroon.

Below right: LSTM PhD student Khalfan Mohammed, Program Manager for the Integrated Program of Lymphatic Filariasis, Schistosomiasis and Soil Transmitted Helminthiasis at the Ministry of Health and Social Welfare, Zanzibar, with individuals who have been successfully treated against LF.

WHAT ROLE DOES LSTM PLAY IN ADDRESSING NTDs?

The Lymphatic Filariasis Support Centre (LFSC) was established in 2000 with funding from the Department for International Development and GlaxoSmithKline. Its primary focus was to work with partners of the Global Alliance to Eliminate Lymphatic Filariasis to progress the goal of elimination of the disease by 2020. In 2005 when the Centre's contract was renewed, one of the goals for the next five years was advocacy to prioritise the integration of parasitic disease control interventions into national health plans, recognising the benefits of treating a package of diseases together. NTDs have become a 'brand name' and now have a momentum in terms of an increased priority on the global health agenda.

In recognition of its expanding role and the opportunity of the arrival of Dr Moses Bockarie in July 2008 as the new Director, LFSC has been renamed the Centre for Neglected Tropical Diseases (incorporating the Lymphatic Filariasis Support Centre). The new title is appropriate and timely especially as the World Health Organisation, with whom the Centre works closely, has established its own Department for Neglected Tropical Disease Control which has received strong support from the Director General, Dr Margaret Chan.

Much of the work of the Centre will continue to have a focus on LF, particularly as it continues to act as the Secretariat of the Global Alliance to Eliminate Lymphatic Filariasis. The Centre received a unanimous vote of confidence to continue at the Global Alliance's recent bi-annual global meeting held in Arusha, Tanzania.

Successes to date prove that the interventions are technically feasible, immediate, visibly powerful and highly cost-effective. They demonstrate that programmes to tackle NTDs can and must be rapidly scaled up and this is what the Centre, together with partners, will work towards achieving.

The WHO list of 14 NTDs:

- Buruli ulcer
- Leishmaniasis
- Chagas disease
- Leprosy
- Cholera/Epidemic diarrhoeal diseases
- Lymphatic filariasis
- Dengue/dengue haemorrhagic fever
- Onchocerciasis
- Dracunculiasis (guinea-worm disease)
- Schistosomiasis
- Yaws
- Soil-transmitted helminthiasis
- Trachoma
- Human African trypanosomiasis (sleeping sickness).



In conversation with Professor David Molyneux and Dr Moses Bockarie

Professor Molyneux's career has resulted in a number of honours and awards, culminating in his appointment as President of the Royal Society of Tropical Medicine and Hygiene. Most recently he has been awarded The Donald MacKay Medal in recognition of outstanding work in tropical health, especially relating to improvements in the health of rural or urban workers in the tropics. Commenting on the award Professor Peter Hotez, of The George Washington University, said "For this 2007 MacKay Medal, I can honestly think of no one more deserving than Professor Molyneux."

In July 2008, as Professor David Molyneux was handing over Directorship (2000-2008) of the LFSC to Dr Moses Bockarie, Programme Coordinator Joan Fahy interviewed them both to give us a better understanding of the changes underway.



Left: Professor David Molyneux and Right: Dr Moses Bockarie

DAVID

Of all your many achievements with the Centre is there one which stands out you are particularly proud of?

I think there are two major ones. The first is that NTDs are now very high on the international agenda: there is no likelihood that the Millennium Development Goals can be reached if we do not tackle these diseases which affect the poorest billion people and we have contributed to the recognition that this can be done. The second is that the LF programme has expanded more rapidly than any other global programme to date in terms of the numbers reached. Since we started in 2000 over one billion people have received treatments. There are active programmes in 44 countries and we have strong evidence that transmission of the disease has stopped in Egypt, Sri Lanka, Vanuatu and Zanzibar. Also through our Bill and Melinda Gates Foundation grant we have trained several people who with Liverpool PhDs are now making a major contribution in the many diverse areas of NTDs.

What will your focus be for the next two years?

Assisting the Centre to evolve under Moses' leadership and remaining active with our partners in countries with WHO and undertaking advocacy work to ensure that the required resources flow to further reach the populations in need.

What are you enjoying most about your retirement?

I don't yet feel I have retired! There are too many ongoing projects - the Presidency of the Royal Society of Tropical Medicine & Hygiene for instance as well as too many requests to travel. I think the most enjoyable thing is not having to access emails, although it is a habit I am finding extremely difficult to break. Perhaps this is a question you should ask in another year!

MOSES

With its official expansion to a Neglected Tropical Disease Control Centre this is an exciting time to join the Centre - what has been your initial focus?

To reflect our commitment to the new expanded portfolio, my initial focus is the engagement of the other filariasis community, working to alleviate the impact of river blindness (onchocerciasis) in Africa. Professor Molyneux and I have long experience working on onchocerciasis in Africa and LSTM has a very strong research group focusing on this infection. Professor Mark Taylor recently invited me to participate in a meeting in Ghana defining research priorities, training and capacity building necessary to tackle this other neglected disease. Current trainees in the Centre are involved in onchocerciasis control. Since my appointment, I have had

several discussions with other NTD support groups and organizations funding NTD activities as a package and I feel excited about the opportunities ahead and very welcomed by all those I have spoken with.

And your longer term goals?

To incorporate other neglected diseases like soil transmitted helminths into the activities of the Centre and engage more in NTD activities in the Asia Pacific region where I have 15 years experience of working with NTDs. I also plan to expand our involvement in operational research.

Has LSTM changed since your time here as a student?

It has expanded so much that it is hardly recognizable from the structure I left when I returned home after my PhD in 1992. I was not aware of the existence of a PCR machine during my student days which is now at the forefront of hi-tech science using state of the art equipment. The transitions in the physical, funding and research environments are phenomenal. I am delighted to have the opportunity to be part of this success story.

Focus on: Tanzania

The United Republic of Tanzania is home to a variety of projects to improve health and eradicate poverty in which LSTM has a major role. Working closely with the Tanzanian Ministry of Health and international development organisations, LSTM is helping to fight disease and improve health systems. These are just some of the major projects, partnerships and activities ongoing in Tanzania in which LSTM has a leading role.



Led by LSTM, the A-WOL Consortium consists of both academic and industrial partners and is funded by a grant from the Bill & Melinda Gates Foundation. The aim of the Consortium is to develop a new chemotherapy treatment against Wolbachia - a bacterial endosymbiont of filarial nematodes responsible for onchocerciasis (river blindness) and lymphatic filariasis (elephantiasis).

This will be achieved through the development of technologies and tools to identify and evaluate novel drugs and targets, and to develop and refine existing drugs and regimes.

Back in 2005 LSTM's Professor Mark Taylor recruited people infected with *Wuchereria bancrofti* from Kimanga village, Pangani, Tanzania. Half were assigned to placebo and half to an 8-week course of doxycycline. They found that doxycycline treatment resulted in almost complete elimination of adult worms 14 months after treatment and a sustained loss of microfilaraemia (the larval offspring) from at least 8 to 14 months after treatment.

Following this research Professor Taylor and the consortium applied for and received a \$23 million grant from the Bill & Melinda Gates Foundation to establish A-WOL. This early fieldwork by Professor Taylor and his team in Tanzania and other African countries was instrumental to establishing A-WOL and moving closer to the long-term goal of eliminating human filariasis.

The Problem



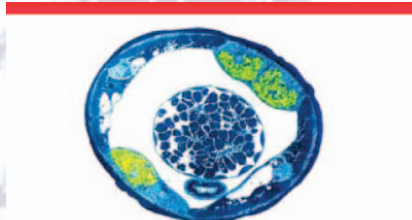
River blindness - 37 million
Elephantiasis - 120 million

The Reason



Symbiotic bacteria (*Wolbachia*)
in the worm

The Solution



Antibiotics clear the worm of
bacteria

Innovative Vector Control Consortium (IVCC)



Malaria is a major public health problem in Tanzania, being the leading cause of outpatient and inpatient health service attendance and the leading cause of death in both children and adults. In the last year for which figures are available, there were nearly 11 million probable or clinically diagnosed cases in a country with an estimated population of 36 million.

Indoor Residual Spraying (IRS) is one of the primary vector control techniques where insecticide formulations are applied directly to interior walls, reducing the number of mosquitoes in the home, where most malaria transmission takes place. IRS would be more effective and cheaper to use if the products lasted longer and did not need to be reapplied as frequently.

IVCC, a consortium of five academic institutions including LSTM, is working to develop new and better ways to control insect carriers of disease and is currently partnering in projects with Bayer and Syngenta respectively to develop new long lasting IRS formulations. Both projects are making good progress and have identified lead formulations which are being tested at field sites in Tanzania and other countries in Africa. Test huts are mocked up as typical homes so that the effectiveness of formulations can be tested under controlled conditions.



Pesticide field testing site in Tanzania

Maternal and Newborn Health in Tanzania



Left: Mama Salma Kikwete, first lady of the United Participants Republic of Tanzania and Mrs Sarah Brown, on a visit to Muhimbili National Hospital, Dar es Salaam, Tanzania.

The Royal College of Obstetricians and Gynaecologists International Office (RCOG IO) is a partnership between the RCOG, Liverpool School of Tropical Medicine (LSTM) and Liverpool Associates in Tropical Health (LATH) and was established in 2005.

Tanzania has one of the highest maternal mortality ratio (950/100,000 live births) and neonatal mortality rates (43/1000) in the world. The key strategy to reducing maternal and newborn mortality is to ensure good quality, skilled birth attendance and essential obstetric care are available and accessible for women. In many countries, there are insufficient numbers of skilled nurse-midwives and doctors to deliver these health services.

The RCOG IO in collaboration with the Association of Obstetricians and Gynaecologists of Tanzania (AGOTA) conducted the first course in essential obstetric and newborn care for health care providers in Tanzania in September 2007. A programme has been developed to scale up in three further regions in Tanzania.

In November 2007 the RCOG IO Director Dr van den Broek accompanied Mrs Sarah Brown, wife of the Prime Minister and member of the RCOG International Advisory Group, on a tour of Mhumbili National Hospital in Dar es Salam Tanzania, to highlight the burden of high

maternal and newborn morbidity and mortality in Tanzania.

The RCOG IO is currently working with WHO Tanzania to develop a plan which will result in improved skilled birth attendance and greater overall quality of maternal and newborn care in Tanzania.

The RCOG IO Life Saving Skills Emergency Obstetric Care course has also been delivered in Kenya, South Africa, Swaziland, Somaliland, Zimbabwe, Malawi and Malaysia.



Above: Participants upgrade their skills in an RCOG IO training course



Eliminating Lymphatic Filariasis in Tanzania

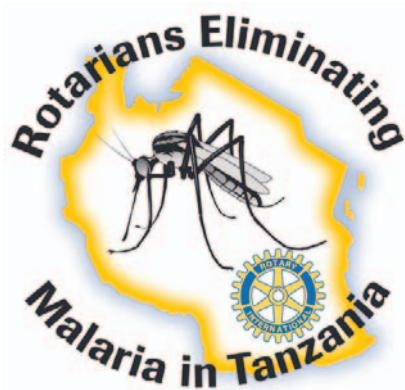
Left: Professor David Molyneux (front row, far left) with former LSTM students reunited at the 5th GAELF meeting in Tanzania.

Below: Example of Lymphatic Filariasis (Elephantiasis) of the leg.

Tanzania has had a national Lymphatic Filariasis (LF) Elimination Programme since 2000 and was the first country to begin a treatment programme. LSTM's LF Support Centre provided the start up funds to support Mass Drug Distribution in Mafia Island in 2000. This was the first LF programme in sub saharan Africa and the Centre has continued to support the Tanzania programme as well as the Zanzibar programme. The Tanzanian Ministry of Health has up scaled with government funds and external donor support to cover nearly ten million people in 2007. The Mafia Island programme has completed six rounds of treatment and the

results suggest that transmission has been dramatically reduced. The same applies in Zanzibar where the programme is now evaluating the results with support from the Gates Foundation. The impressive results in transmission have also been seen in treatment using limb washing and hydrocele surgery where LF sufferers have shown remarkable improvement in their condition, reduced limb swelling and no fevers associated with filarial infection.

The 5th Meeting of the Global Alliance to Eliminate Lymphatic Filariasis (GAELF) was held on 1st – 3rd April 2008, in Arusha, Tanzania.



Rotarians Eliminating Malaria in Tanzania

Rotarians Eliminating Malaria in Tanzania (REMIT) and LSTM work together to combat malaria in Tanzania. REMIT aims to raise funds to provide insecticide treated nets, insecticides and medicines as well as HaemaCue machines to test for malaria.

Funding is also being provided for greater education and awareness programmes which aim to increase the level of local knowledge on the symptoms and treatment of malaria and the often simple steps that everyone can take to increase their level of personal protection against the disease.

Through fundraising, REMIT supplies insecticide treated nets to the two Rotary clubs in Arusha, in northern Tanzania, who are the local partners in the programme.

They distribute the nets along with the Rotaract and Interact clubs in Arusha.

LSTM's Dr Guy Barnish was recently awarded a Fellowship Award from REMIT for his work in helping to eliminate malaria, see page 17.

Focus on
Tanzania

New horizons: LSTM's key role in the growth of the Centre for Strategic Health Studies, Damascus

The Centre for Strategic Health Studies (CSHS) is an integral part of the European Union's Health Sector Modernisation Programme in Syria. The project commenced in November 2006 as a collaboration between the health sector and the Liverpool School of Tropical Medicine. The Centre aims to train health professionals to Masters and PhD level in public health, health systems management and health economics, to commission and undertake appropriate research and provide consultancy, with the aim of becoming the region's most advanced hub of health studies.

Although much remains to be done, great progress is being made, particularly in learning and teaching. The first Masters programmes in Public Health and Health

Systems Management concludes next year, during which students will carry out a research project submitted as a dissertation. The students have been exposed to a wide range of approaches to teaching, many very different to the didactic and rote learning methods they have previously experienced. Several of the teaching staff are based at LSTM and are able to give the students the benefit of their enormous collective international experience within their fields.

Using the lessons learned in the first academic year should enable all staff to confirm major progress toward the aim of running training programmes to a standard and quality that is taken for granted in western Europe. Institutional, research and consultancy service development are also well underway.

A teaching review meeting at the Centre for Strategic Health Studies.



CSHS Project Director, Amir Hassan

Organisational, institutional and national staff capacity building were addressed from the outset by LSTM as key to ensuring the development and sustainability of the Centre's core work areas of education, research and consultancy services. Several LSTM staff have visited the Centre as Short Term Experts to advise on programme, policy and strategy development and implementation in their respective areas:



Hazel Howden-Leach, Educational Technologist: "Part of the capacity development arm of the programme in Syria is to enhance the learning and teaching skills within the Centre. My role is to design and run a structured teacher training programme that offers certification to the recognised UK standard and to work with the staff to develop a Management Information System."



Alan Hughes, Communications Manager: "I was asked to advise the CSHS on PR and communications, and specifically to develop a strategy which could be used to address the identified needs. I was able to use my experience of the HE environment at LSTM to plan in the strategy how communications could help the Centre's ambitious aims to be delivered."



Julia Martin, Information Systems Manager: "The CSHS had a requirement to establish suitable IT and Library facilities. My role was to carry out an overview of these, drawing on current UK best practice and advise how these could be implemented. Martin Chapman from the Donald Mason Library has also assisted with the development of the Library Management System, staff training and library policy implementation."



Sian Roberts, Research Manager: "During my visit to Damascus, I worked with my Syrian counterpart on setting up research management systems. The Centre aims to develop an active research base capable of attracting competitive international funding and I provided advice and assistance in setting up the systems to support this."



HRH Princess Royal opens Centre for Tropical and Infectious Diseases

The biggest ever expansion in LSTM's research facilities was declared open for business on Friday 18 July when HRH The Princess Royal officially opened the new £23 million Centre for Tropical and Infectious Diseases (CTID).

The state of the art facility, some ten years in the planning, will help to save thousands of lives around the world by generating and trialling drugs, vaccines and insecticides that will directly improve health.

The Princess Royal, LSTM's Patron, was accompanied by the Lord Lieutenant of Merseyside, Dame Lorna Muirhead, and the Lord Mayor and Lady Mayoress of

Liverpool. She was introduced to President Sir Mark Moody-Stuart, Chairman James Ross and Director Janet Hemingway before touring the building. Several research projects underway in the new building were showcased, from the multi million pound programmes funded by the Bill and Melinda Gates Foundation to research projects looking at indoor air pollution, safe motherhood and anti malarial drug development.

The Princess then joined groups of invited guests to learn more about their work and involvement with LSTM before calling the proceedings to a close with some words to mark the occasion and the unveiling of a plaque.

The Princess commented that the new building had given an enormous boost to research activities, enabling LSTM to make an even bigger impact, adding that because "the Liverpool School of Tropical Medicine already punches well above its weight in terms of numbers and impact on tropical diseases, that bodes very well for the future."

The Princess paid tribute to LSTM's "astonishing workforce" and referred to the ongoing effort against fatal and debilitating diseases before she performed the



opening ceremony, saying: "Some of them I suspect will never go away but this building has to be at the edge of how you deal with those issues and you've given yourself a very good chance of doing that."

Thanking her, Chairman James Ross acknowledged the keen interest that the Princess takes in LSTM. He said: "You've been our Patron for eighteen years since you took over from your father in 1990, and have always been an enormous supporter, and a very informed one."

Commenting on the new facilities, Professor Janet Hemingway, said: "In our 110 year history, we have made significant contributions to health from our existing facilities. This fantastic new building gives us the potential to make an even greater impact on the diseases affecting the world's poorest people."

"It brings together, under one roof for the first time, a multidisciplinary team of scientists capable of taking a scientific idea from 'molecule to man' and is at the very heart of our long term plans to generate products to directly improve health in the developing world."

The Northwest Regional Development

Agency (NWDA) and the European Objective One Programme each gave £9 million towards the project. There has also been substantial support from Liverpool City Council and the Wolfson Foundation among others.

Steven Broomhead, Chief Executive of the NWDA, said: "The new Centre cements the Northwest's growing reputation as an international leader in medical and scientific research and development."

Commenting on the new building, Chris Musson, Head of European Programmes at Government Office for the North West, said: "The CTID will enhance LSTM's position as an international centre of excellence in tropical medicine and support the creation of hundreds of highly skilled jobs for local people."

The Centre provides some 7,800 square metres of laboratory, write up and office space on four levels, including Category III laboratories and will further augment LSTM's capability as the only organisation able to take drug research from molecule design to first studies in man through to large scale clinical trials. CTID will also provide training for biotech graduates and build further links with the international pharmaceutical industry.



Malaria in Pregnancy (MiP) Consortium Update



The Malaria in Pregnancy (MiP) Consortium was established in March 2008 with a \$30 million grant from the Bill and Melinda Gates Foundation. Led by LSTM, the Consortium consists of more than 40 partner institutions in 28 countries, joined in the fight against MiP, which threatens more than 80 million pregnancies a year globally. Malaria in pregnancy is a major cause of severe maternal anaemia and preventable low birth weight in infants, which greatly increases the risk of death. In Africa its complications are responsible for as many as 100,000 infants dying needlessly every year.

Current strategies to control MiP include preventing infection with insecticide treated nets and preventative medication, and treating malaria and consequent anaemia promptly and effectively. Unfortunately, these strategies are not widely applied for a number of reasons and where they are, there is growing resistance to the most commonly used drugs. There is also a lack of knowledge and consequent policy initiatives regarding prevention in Asia and Latin America, where malaria transmission is low but the effects are proportionately more severe.

The Consortium's research projects are aiming to find new drugs for the prevention and treatment of MiP, to define the burden of, and determine the most effective prevention strategies for malaria in areas outside of Africa and to identify the barriers to scaling up new and existing interventions to achieve maximum public health impact. These projects are now underway, with some expected to generate initial results by spring 2009 which will inform a second phase.

The secretariat of the Consortium is based at LSTM and acts as the main source of information and communication. It provides assistance to the Chief Executive Officer and the chairs of the governance

committees in day-to-day management. The Secretariat also maintains a resource centre including an online library dedicated to malaria in pregnancy, containing published and unpublished literature relating to MiP, including a trial registry of planned and ongoing trials, for use by scientists, policy makers, funding agencies, industry and other interested parties. The MiP library can be found at www.update-software.com/publications/malaria. The Consortium has also established a brand identity and a website, which can be found at www.mip-consortium.org

Mothers and newborns at the Kingasani maternity hospital, Kinshasa, Democratic Republic of Congo.



photo credit Steve Meshnik

TB Under the Microscope

The diagnosis of pulmonary TB is based on the examination of sputum samples using light microscopy in most high burden countries. This process is time consuming and has low sensitivity. Fluorescent microscopes (FM) have a higher sensitivity and save time, because the slides are examined at lower magnification. These microscopes are expensive, require dark rooms and frequent replacement of the lightbulb. There are thus hundreds of unused microscopes in developing countries.

Recent advances in Light Emitting Diode (LED) technology have led to the development of LED-based fluorescent microscopes. These microscopes cost a fraction of conventional microscopes, do not require a dark room and the LEDs last for more than 50,000 hours. These

microscopes have the potential to replace conventional FM or light microscopes at reference and peripheral laboratories of high TB burden countries, but need to be properly evaluated. LSTM's Dr Luis Cuevas and Dr Mohammed Yassin are evaluating the sensitivity, specificity and acceptability of LED-FM in a multicentre study in Nigeria, Nepal, Yemen and Ethiopia.

The study is funded by the World Health Organisation and builds on a series of studies conducted to optimise smear microscopy. If all goes well, these studies are likely to change global policies for the diagnosis of TB in 2009-10.

Dr Yassin demonstrating the new LED-FM microscope to staff in Ethiopia



Teamwork shows the way forward for LATH

Liverpool Associates in Tropical Health (LATH), LSTM's consultancy and technical assistance arm, has faced some challenges recently. Two valuable programmes in Nigeria and Malawi funded by the Department for International Development (DFID) came to an end and it was imperative to win new contracts. However, LATH's recent track record was disappointing. Interim CEO Phil Gould takes up the story:

"Our recent bid success for projects had been below the norm. The LSTM linkages meant that we generally scored highly on the technical component of our bid, but it seemed we were losing out because of poor commercial scores. LATH needed to step up its game and become more competitive to win new work.

We looked at the organisation and formed a bid team, led by Stephen Collens, head of business development and supported by Dougal Freeman, our finance director. The whole bid process was overhauled, responsibilities clearly defined and a new process devised which reconfigured how we compiled and costed our bids.

I'm delighted to say that the new approach is working – we have won an important new health research capacity strengthening consultancy project in Malawi, an immunisation project in Nigeria, a health systems strengthening project in South Sudan and a major extension to our health

systems work in Kenya. Funders who have never shortlisted us before have begun to respond to our new approach. Danida (Danish aid) are now positioning us at the final stage of the selection process for work in Kenya, whilst our commercial scores with our traditional funders such as DFID have begun to increase, with the recent Malawi project win earning us our highest commercial score ever.

The new project work necessitated restructuring our programme arm into a programmes delivery team. This team, led by Stephen Cooper, is presently recruiting in the UK and overseas for a number of new positions to support these projects. In Liverpool we are also recruiting for a new Programmes Operations manager for our DFID programmes and strengthening our programmes team for the USAID projects.

The winning of this new work has also meant that we have begun to change our regional office network. We have opened a new office in Malawi and formed a new Company for our work – LATH Umoyo Ltd (the Chichewa word for health). We have also opened an office in Washington DC to help with our USAID work. This has helped us to resolve some difficulties with the start up of residual spraying projects in a number of African countries and has continued our involvement in the USAID capacity project, stimulating a number of USAID funded supportive technical assistance (TA) projects.



Dr Phil Gould, LSTM's Chief Business Officer

Short term technical assistance is an area that LATH is now re-organising, and has developed the concept of a business centre for TA, around a TA team, which we will be briefing LSTM and other partners on shortly.

Finally, with LATH now positioned to win and deliver more important health programmes around the world, I will be handing over to the new CEO, Dr Stewart Tyson, in early September 2008. Stewart is a medical graduate of Liverpool and joins us from DFID where he was head of health policy. We look forward to welcoming Stewart to LATH and wish him well in his new role.



Above: The New LATH USA office in Arlington, Virginia, just outside Washington DC.

Left: Mr Fisher, Margaret Caffrey, Paul Marsden and Cecilia Cruz outside the LATH Umoyo Ltd Malawi office.

LSTM branding rollout

LSTM's new brand identity was officially launched on 2 January 2008 with an introductory quick start leaflet, redesigned website, intranet, letterhead paper and compliment slips. Since then, the new brand has been applied to business cards, internal and external signage, posters, presentations, exhibitions, leaflets, screen displays, merchandise – even a mini superlambanana!

Approval for a brand review was authorised in late 2006 and an external design agency was selected to assist with the process. A series of workshops, a further review and a final period of external testing produced a design with overwhelming support, a simple and sympathetic evolution of the old identity into a fresh, modern forward-looking image which supports LSTM's future aspirations.

An extensive guidelines document with full technical specifications and worked examples of how to use the brand across different media was produced to help with the transition. Despite the comprehensive approach, there were instances where some further interpretation was needed. Alan Hughes, Communications Manager, said: "We tried to cover as many scenarios as possible but within a document that would be manageable. We've developed a new template for using the brand within poster presentations as a result of some of the feedback we've received."

Feedback on the new brand has been overwhelmingly positive, with staff and students alike keen to start using the new logo. Sue Cain, Administrator in Child and Reproductive Health group, said: "I took part in one of the initial workshops and chose an early version of the new logo as one of my favourites but in a different colour. Six months down the line, I like it more rather than less - I think it is modern, clear and very recognisable. It presents an image of an institution with a purpose and a mission without being pretentious. I've even become more reconciled to the colour!"

Sarah Lewis-Newton, Library Manager, said: "The Library recently took over provision of LSTM merchandise which happily coincided with the rebranding, giving us freedom to launch a new range of items. I believe that the new logo has been very well received, especially if the merchandise sales are anything to go by."





Dissemination capacity building workshop for researchers from China and Vietnam

Writing academic papers for publication in international journals is a key method of disseminating research findings, and a critical capacity which researchers must develop to enable them to influence international health policy and strategies. Researchers working on health systems development in the International Health Group at LSTM are collaborating with colleagues in China and Vietnam on a large EU-funded project aiming to develop equitable and sustainable rural health insurance in these countries. Researchers and particularly junior staff in partner institutions spend a great deal of effort organising and conducting data collection,

but need varying degrees of mentoring and input to use the data they have collected to develop academic papers for international publication.

The main aim of the workshop, funded by the China Medical Board, was to build their capacity to develop papers for submission to international journals, but the workshop focused on the development of specific papers as a practical exercise.

Senior researchers from LSTM, European, Chinese and Vietnamese partners collaborated to support the development of these papers through presentations,

plenary discussions, small group work and one-to-one mentoring.

The workshop was organised by Dr Rachel Tolhurst, Lecturer in Social Science in International Health, Dr Xiaoyun Liu, Lecturer in International Health and Mrs Joanna Raven, Research Assistant in International Health.

REMIT Award for Guy Barnish

Dr Guy Barnish, Senior Lecturer in Parasitology at LSTM was presented with a Rotary International Paul Harris Fellowship Award, for his work in helping to eliminate malaria in Tanzania. Professor Barnish is a sponsor of REMIT (Rotarians Eliminating Malaria in Tanzania) which aims to raise funds for equipment, education and research into malaria and is working with LSTM and other institutions to combat malaria in Tanzania.

Dr Barnish, second from left, receiving the Rotarian award

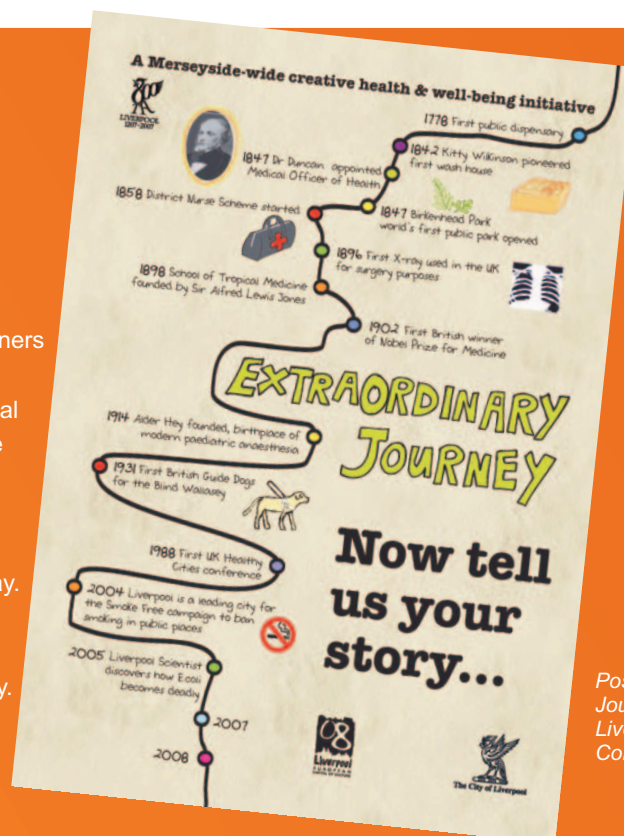




LSTM is proud to be celebrating the Capital of Culture accolade alongside so many of the City's institutions and community groups. Staff and students have been working with partners across the City and beyond to place our own unique mark on a year to remember.

Extraordinary Journey

In September 2007 Liverpool Culture Company joined forces with LSTM and a host of other partners to celebrate the impressive and pioneering contribution made by Merseyside's health & social care community to the culture of the City and the effect on the rest of the world. Extraordinary Journey encapsulated those contributions and charted the role that LSTM and other institutions have played, from the 19th century to present day. The festival launched at Liverpool's St George's Hall and told this extraordinary story through visual art, photography, drama, dance and poetry. A creative health network has been established to facilitate future collaborations.



Poster for Extraordinary Journey, courtesy of Liverpool Culture Company

Discover India

Dr Gibby Koshy, a Paediatrician and Postgraduate Research Student with the Child and Reproductive Health Group at LSTM, and his wife Dr Navya Grace Paul were among the participants in the 'Mil Sur Mera thumara' cultural event conducted as part of the Discover India programme 2008. A festival of Indian dance, music and food was organised and conducted by the Liverpool Malayalee Cultural Association (LIMCA) on 26th April 2008 at Liverpool's Broadgreen High School as part of the Capital of Culture celebrations, with the support of Liverpool City Council. This event has generated widespread interest among the local communities in Liverpool,

as it has opened up a unique opportunity to indulge in the diverse and rich cultural heritage and culinary experience of India. Gibby is just one of many students at LSTM organising cultural events for the benefit of fellow students and the wider community. LIMCA is a non-profit, non-political, non-religious cultural organisation with a constitution and by-laws. LIMCA provides a forum for Malayalees residing in Liverpool and neighbouring areas to meet and exchange views, foster friendship and share social, educational, literary, artistic and cultural heritage.



Alexei Sayle visits LSTM

'Alexei Sayle's Liverpool' follows the City's cultural identity and history, as revisited by Liverpool born comedian and writer Alexei Sayle. Paying tribute to Capital of Culture status, BBC 2 commissioned Oxford Film and Television to produce a three part series screened in June 2008. Alexei interviewed Professor Steve Ward and with the help of Rick Young examined some rather exciting specimens in the Dagnall Laboratory before joining Rob Harrison and Paul Rowley in the Venom Research Unit.

• Alexei Sayle with LSTM's Rick Young



LSTM Hosts Humanitarian Photography Exhibition

From September to October 2008 LSTM hosts the 11th Luis Valtuena International Humanitarian Photography Award Exhibition. The award is a tribute to four humanitarian workers who were murdered in the field. The exhibition serves to promote the work of those committed to working wherever humanitarian emergencies arise, a commitment shared by LSTM through the Diploma in Humanitarian Assistance, the MSc in Humanitarian Programme Management and the MSc in Humanitarian Studies. The exhibition is organised by Médecins du Monde UK, an international humanitarian aid organisation that recruits medical and non-medical volunteers, who provide healthcare for vulnerable populations.



Image courtesy of Médecins du Monde UK

• Southern Sudan: the Fight against Sleeping Sickness 2 – Miguel Cuenca Candel (Spain) 2007

Super'kalazar'banana

LSTM joined the Go Superlambananas event which saw more than 100 mini replicas of the original SuperLamBanana sited across Liverpool this summer. The original was commissioned by Liverpool City Council and designed by Japanese artist Taro Chiezo, whose sculpture quickly became an iconic symbol of Liverpool. Inspiration was drawn from Liverpool's role as a world port, importing and exporting bananas and lambs wool. As part of the Capital of Culture celebrations, organisations in Liverpool were invited to bring something of their own character to the new designs. LSTM scientists Rod Dillon and Hektor Diaz wanted to communicate how blood sucking sandflies spread parasites called *Leishmania* causing the disease Leishmaniasis which kills thousands of people each year.

The design is an artistic interpretation of the life cycle of the *Leishmania* parasite as it moves between the insect and the human. The disease is also called 'Kala Azar' (Hindi for Black Fever) hence the name of the sculpture, Super'kalazar'banana. Funded by the Wellcome Trust, the group at LSTM are working on diverse aspects of the parasite and sand flies; trying to understand how the insect transmits the parasites, sequencing the genome of the sand fly *Lutzomyia longipalpis* from South America, researching vaccines and also studying the epidemiology of the disease with colleagues in Brazil.



Superkalazarbanana outside LSTM
www.liv.ac.uk/lstm/lambanana

Education and Training Programmes 2007-2008

Masters Programmes

Masters in Tropical & Infectious Diseases

15 students attended this programme from September 2007, from 11 countries: Indonesia (1), Iran (1), Ireland (1), Kuwait (1), Libya (2), Nigeria (2), Spain (1), Sudan (2), Tanzania (1), UK (2), Zimbabwe (1).

Masters Medical Microbiology

11 students attended this programme from September 2007 from 8 different countries: Ethiopia (1), India (1), Ireland (1), Guatemala (1), Nigeria (1), Malawi (1), Saudi Arabia (1), UK (4).

Masters Biology & Control of Parasites & Disease Vectors

14 students attended this programme which started in September 2007 from 6 different countries: Canada (1), Germany (1), India (1), Malaysia (1), UK (9), Zimbabwe (1).

Masters Molecular Biology of Parasites & Disease Vectors

2 students attended this course which started in September 2007 from 2 countries: UK (1), USA (1).

Masters in Veterinary Parasitology

5 students attended this course, which started in September 2007: UK (4), Ireland (1).

Masters in International Public Health

7 students attended this programme which ran from September 2007: Afghanistan (1), France (1), Germany (1), Ireland (1), Japan (1), Netherlands (1), Tanzania (1).

Masters In Humanitarian Studies

11 students attended this programme which began in September 2007. Students came from 5 countries: Spain (2), Nigeria (1), UK (3), USA (3), Zimbabwe (1).

Masters in Humanitarian Programme Management

7 students attended this programme which began in September 2007 from 4 countries: France (2), Netherlands (1), Switzerland (2), UK (2).

Masters in Tropical Paediatrics

Nine students attended this course which began in September 2007, from 7 countries: Iran (1), Japan (2), Kuwait (1), Libya (1), Spain (1), Sudan (2), Uganda (1).

Diploma & Certificate Programmes

Diploma in Tropical Medicine & Hygiene

65 students attended this programme which began in September 2007 from 19 countries: Australia (1), Austria (1), Canada (1), China (1), Germany (5), Ghana (1), Greece (1), India (1), Italy (3), Libya (1), Netherlands (1), Nigeria (4), Norway (2), New Zealand (1), Singapore (1), Sri Lanka (1), Sudan (1), UK (36) and USA (2).

Diploma in Tropical Medicine & Hygiene

87 students attended this programme which began in February 2008 from 25 countries: Afghanistan (1), Australia (5), Canada (2), Denmark (1), Egypt (1), Germany (7), India (3), Ireland (1), Italy (2), Japan (2), Malaysia (1), Myanmar (Burma) (1), New Zealand (1), Nigeria (3), Norway (4), Pakistan (1), Saudi Arabia (1), Singapore (1), South Korea (1), Spain (1), Sweden (1), Switzerland (1), Sudan (3), UK (36) and USA (6).

Diploma in Humanitarian Assistance

12 students attended this course which ran from February - April 2008. Students came from 10 different countries: Australia (1), Germany (1), Ireland (1), Netherlands (1), Madagascar (1), Malawi (1), Spain (1), Switzerland (1), UK (3), USA (1).

Diploma in International Public Health

3 students from 3 countries: Gambia (1), Malawi (1), Sudan (1).

Diploma in Reproductive Health

7 students attended this programme which ran from April July 2008 from 4 countries: Ghana (2), Nigeria (3), Malawi (1), Tanzania (1).

Certificate in International Public Health

1 (UK) student attended this programme which ran from September 2007 to January 2008.

Certificate in Tropical Community Medicine & Health

11 students attended this programme which ran from September to December 2007 from 4 different countries: Australia (1), Norway (6), Sweden (1), and UK (3).

Certificate in Tropical Community Medicine & Health

8 students attended this programme which ran from February to May 2008, from 7 different countries: China (1), Ethiopia (1), Japan (1), Norway (2), Spain (1), Taiwan (1), and UK (1).

Research students

97 students from 28 countries were registered as research students in May 2008: Belgium (1), Botswana (1), Canada (1), China (2), Egypt (1), Ghana (2), Ireland (2), Kenya (4), Libya (1), Malawi (11), Malaysia (1), Maldives (1), Mexico (2), Netherlands (1), Nigeria (2), Pakistan (1), Palestine (1), Peru (1), Portugal (3), Saudi Arabia (3), Sri Lanka (1), Syria (2), Tanzania (2), Thailand (5), Uganda (1), United Kingdom (35), Venezuela (1), Yemen (6).

In addition, 163 people attended LSTM & LATH short courses during 2007/2008.

Medals and Prizes

Diploma in Tropical Medicine & Hygiene
Milne Medal in Tropical Medicine
Matthew Kelly, 2008,
Rosemary Fok, 2007

Blacklock Medal in Parasitology and Medical Entomology
Patrick Avery, 2008,
Susan Morpeth, 2008

Warrington Yorke Medal in International Community Health
Denise Wild, 2008,
Richard Maude, 2007

Masters in Applied Parasitology
Jervis Prize
Gemma Smith, 2008

Andrew Campbell Memorial Prize
Jennifer Holden, 2008

Most improved student
Colin Bullough Prize
Sadiya Nasir, 2008

New Professor of International Health appointed

Joe Valadez joined LSTM's International Health group in July from the World Bank, where he was the Senior Monitoring and Evaluation Specialist on the Global HIV/AIDS Programme and the Malaria Booster Program for Africa. A community epidemiologist, he earned his Doctorate in Science at Harvard, joining the Harvard faculty in 1986. He has since worked in more than 45 countries, including Kenya, where he was Director of Projects for the African Medical and Research Foundation and in Rwanda where he served as Senior Health Officer for UNICEF immediately after the genocide, helping the new Rwandan government develop a Ministry of Health. Much of his research has focused on the development of rapid and practical programme monitoring and evaluation techniques that adapt quality control statistics as used in industry for application in community health programmes. He developed a state of the art Lot Quality Assurance Sampling method during the mid-1980s which is used internationally and recently integrated this approach with

cluster sampling for applications in large countries. Currently, he is developing new approaches for rapid mapping of disease prevalence to support community treatment programmes of schistosomiasis and school-based intermittent preventive treatment of malaria. He is also working to assess the relative effectiveness of diverse service delivery strategies on covering community populations with public health programmes.

Listing his priorities on joining, Joe said: "I'm developing a six-month workplan to guide my efforts while I settle into LSTM. Firstly, I intend to learn about the work that colleagues are carrying out so that I can link my own research with them whenever possible. Secondly, I am studying the priorities of likely donors and preparing concept notes which I can use to begin a dialogue with them - in my opinion, the best recipe for successful development of funding proposals is to include donors as participants early in the design stage. Finally, I'm consolidating my contacts with



Professor Joe Valadez

partner agencies so that I can establish a network of institutions with whom I and LSTM can collaborate."

Monday 2nd February - Friday 6th February 2009 Travel Medicine & Expedition Medicine Course

The 5 day course is aimed at interested health professionals advising travellers or those planning to work as expedition medics.

This course will cover the fundamentals of travel health and expedition medicine.



Venue:
**Liverpool School of Tropical Medicine,
Pembroke Place, Liverpool
L3 5QA**

To enquire about the course please contact:

Laura Hand
Postgraduate Programme Administrator
Liverpool School of Tropical Medicine
Pembroke Place
Liverpool, L3 5QA
Telephone: 0151-705-3208
Email: l.c.hand@liv.ac.uk

**£525 for full week
or £115 per day**

Fundraising Appeals

As a registered charity LSTM relies heavily upon private donations of all sizes to undertake existing work and to react to new developments. Funding comes from a mixture of public and private sector supporters. Further support is particularly required to continue a refurbishment programme and provide further support for students.



Refurbishment Appeal

Refurbishment of LSTM's three older building is a priority. The success of establishing CTID is closely followed by the demand for new and improved teaching areas and office accommodation to provide a full range of facilities for staff, students and visitors. Donations of any amount will contribute to the overall programme of development.



Foreign Currency Appeal

LSTM accept donations of foreign currency (coins or notes) of any amount. Please have a look at home and in work to see if you have foreign currency that you have left over from an overseas trip. Even if the currency is no longer in circulation we can still exchange it for funds that will improve people's lives.



Support for Students

LSTM needs extra funds to provide new scholarships and basic hardship funding for students who have poor resources of their own. Donations of any amount can contribute to training the doctors, scientists and health professionals who are fighting to control diseases of poverty and to develop more effective systems for health care.



Business Support

If your business is interested in supporting LSTM by making a donation, sponsorship or providing goods or services in-kind, or if your business would like to place an advert in the next addition of this publication, please contact the Development Office to discuss how supporting LSTM is good business.



Image courtesy of the Carter Center

Neglected Tropical Diseases (NTDs)

The newly established Neglected Tropical Disease Control Centre (incorporating the Lymphatic Filariasis Support Centre) expands the work of the LF Centre and will be pushing forward more programmes to tackle NTDs. Further information on NTD Control Centre and an interview with Dr Moses Bockarie and Professor David Molyneux can be found on pages 6 & 7.

If you are a former LSTM student or member of staff and would like to be kept informed of developments at LSTM please email the Development Office with your latest contact details and we will send you *tropical* either by email or post.

If you would like to support any of these appeals or another aspect of work at LSTM please contact Development Officer Billy Dean via the details right.

Billy Dean, Development Officer,
LSTM, Pembroke Place, Liverpool, L3 5QA, UK
Email: william.dean@liv.ac.uk
Tel: +44 (0)151 705 3272 Fax: +44 (0)151 705 3743
www.liv.ac.uk/lstm/about/fundraising_alumni/index.htm

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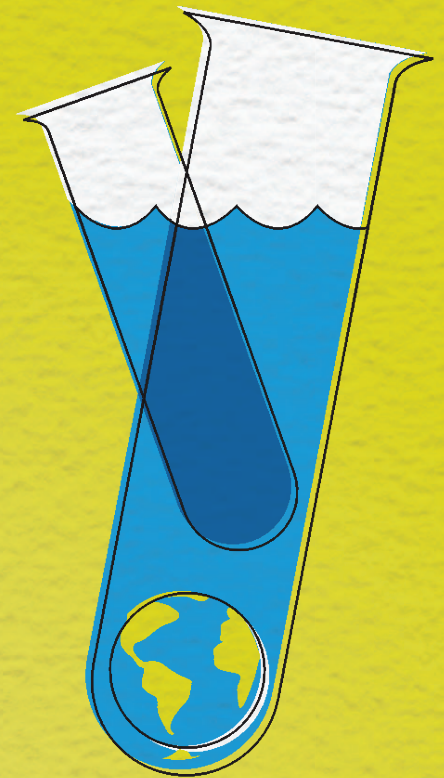
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Subsidiary of the Liverpool School of Tropical Medicine





LSTM Mission Statement

As a centre of excellence, the Liverpool School of Tropical Medicine, through the creation of effective links with governments, organisations and institutions and by responding to the health needs of communities, aims to promote improved health, particularly for people of the less developed countries in the tropics and sub-tropics by:

1. providing and promoting high quality education and training;
2. conducting first-class research and disseminating the result of that research;
3. developing systems and technologies for health care and assisting in their transfer and management;
4. providing appropriate consultancy services; in fulfilling this mission the Liverpool School of Tropical Medicine also provides a clinical service of acknowledged excellence.



www.liv.ac.uk/lstm