



IMR Nius

Newsletter of the PNG Institute of Medical Research



April - June 2010

More awareness on Pneumonia

By Geraldine Vilakiva

Pneumonia continues to receive little or not attention despite being the leading cause of death in children under 12 months of age and is second only to malaria in children between 1-5 years of age in PNG.

According to the National health Plan 2000 -2010, both pneumonia and malaria, are the top two causes of deaths in PNG and top three reasons for outpatient diagnosis and admissions in health facilities in the country.

Globally, it is estimated that 2 million children under the age of five years die annually from pneumonia – more than malaria, TB and HIV/AIDS. Significantly, most of these deaths occur in developing countries including PNG.

Children under five years and elderly people continue to be the most vulnerable age groups with high rates of pneumonia deaths.

The Papua New Guinea Institute of Medical Research (PNGIMR) recently conducted a study and results estimates deaths in children who are under six months of age to be 250 per 100, 000 to die from pneumonia.

It is a very serious preventable disease in the country but sadly, it continues to receive little attention.

Awareness is one way that PNGIMR hopes to get the attention of

the public on how serious pneumonia is.

Together with its collaborators - World Health Organisation (WHO) and the National Department of Health, PNGIMR will be hosting a pneumonia colloquium on the 23rd– 26th of August this year.

The aim of the colloquium is to celebrate the achievements of pneumonia research in the country and also highlight pneumonia to the public as the forgotten killer.

“We want to bring the attention of the public to something that needs to be looked at seriously to achieve the Millennium Goals,” said Willie Pomat, head of the immunology unit at PNGIMR and chairman of the colloquium organising committee.

The theme for the colloquium is ‘Action against pneumonia: a celebration of 40 years of pneumonia research in PNG and finding the best way forward.’

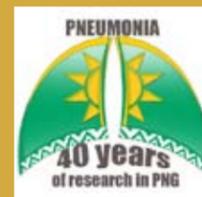
It is hoped that by bringing the best national and international scientist and policy makers, the colloquium will provide an avenue to highlight and discuss strategies to address the pneumonia problem.



The follow-up study on PCV has commenced this month. Pictured is Gearad Selau, Head Nurse of the PCV-follow-up study, explaining to parents of children who will take part in the study, what the follow-up study is about and what will be involved in the study..

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COLLOQUIUM UPDATES

GlaxoSmithKline has donated A\$200, 000 towards the colloquium. This money will fund travel arrangements of Australian researchers who will be attending this event.

Colloquium fundraising updates.....

The Infection and Immunity Unit hosted “Sunday Afternoon Trivia” on the 6th of June. The event consisted of teams of five competing in answering questions on current affairs, geography, sport, entertainment and local knowledge. Teams included representatives from the University of Goroka, Care International, Goroka Preparatory School and Clinton Foundation. IMR teams were also well represented with the Malaria Control team taking the top prize. The event was enjoyed by all and raised over K1000.00 for the Pneumonia Colloquium.

A total of six fundraising dances were organised by each units at IMR Goroka and the Madang branch to support the colloquium. So far all these fundraising dances were successful. Thanks to everyone who came to support these events. ORU is organising another at same place Firehouse, on the 16th of July.

Pneumonia colloquium caps are on sale for just K25 and come in black, blue, navy blue, beige, yellow and maroon. Only 200 in stock. So if you haven't got one yet, hurry up and get one, while stocks lasts.

Locally made colloquium mugs are also on sale for K25 and come in three colors – blue, green and yellow. They have the colloquium logo molded onto the mugs. Limited stock, so get yourself one if you haven't. It's a good souvenir too.

IMR signs MoA with Esso Highlands

The IMR-LNG Health monitoring research project – one of PNG Institute of Medical Research's big projects this year will soon begin, once the final contract is to be signed.

So far the institute has signed a Memorandum of Understanding (MoU) with ExxonMobile, the parent company of the major LNG project, in February this year. During the signing of the MoU, IMR director, Professor Peter Siba described it as a “partnership for health” and was very pleased that the institute will work and develop health programs that will benefit the people in the LNG project areas as well as other parts in PNG.

This will be a five year research project on the different health issues affecting the PNG population. The five main infectious disease research programs being investigated are; vector borne disease (malaria and dengue fever), diarrhea diseases (bacterial, parasite and virus infection, including cholera), HIV/ STI, respiratory infections (pneumonia, flu), TB and other life style or non-communicable diseases such as diabetic, heart diseases and obesity.

PNGIMR with its long history in medical research as its role in establishing national health policies and priorities, this project will be carried out as scientific research activities with aims, objectives and very sound scientific methods and approach as well as the measurable outcomes. It is hoped that information from these studies will greatly benefit the developer, population in the project areas, PNGIMR and the country as a whole as;

- Information from these studies will assist the developer in better understanding the different health issues affecting

the population in the LNG project areas and put in-place health monitoring systems to improve the health of the people.

- As a training platform for our national scientific officers at PNGIMR in conducting research into the various diseases, for their Master and PhD studies.
- The accurate and comprehensive scientific data will benefit the National Department of Health and the Government by using the data to assist in policy making and serve as early warning tools of any outbreak of diseases.

“We have the facilities such as laboratories as well as expertise and specialists to carry out the research and also because of IMR's long history of medical research – the transparency and accountability,” said Dr Suparat Phuanookoonun, a senior research fellow attached with the Operational Research Unit

The project will also assist the institute in expanding the training and research opportunities and will significantly contribute to the capacity building of our National scientists as the institute is looking at employing about 400s staff for this project alone.

A lot of the institute's collaborators from prominent research institutes (University of Queensland, Australia, and Swiss Tropical and Public health Institute, Switzerland) have already stated their support and willingness to help PNGIMR especially in the Post-graduate training as well as provide the technical supports for the laboratory and field work.

Fogarty Training ends (2005 - 2010)

Globally, infectious diseases continue to impose a tremendous health burden in resource-poor countries throughout the world, claiming millions of lives annually and inflicting severe morbidity that results in significant losses in economic productivity and social progress. Attempts to control infectious diseases endemic to developing countries suffer due to an incomplete understanding of the pathogens, their disease manifestations and transmission mechanisms, inadequate preventive measures and interventions, and inadequate health services and disease control efforts.

This article highlights the need for more training of our national scientists in medical research and takes a look at one successful training program that focused on that need. This is the success story of the Fogarty training program.

In Papua New Guinea, infectious diseases are responsible for at least 40 per cent of our public health burden and our country's research workforce lack the expertise to understand these diseases.

Thus they continue to be dependent on a small number of expatriate specialists, whose laboratory-based studies focus on specific pathogens to clarify mechanisms of infection, disease, drug resistance and vaccine development associated with microbial pathogens.

Realizing this, the Global Infectious Diseases Research Training Program (GIDRTP) or Fogarty training was established at the PNG Institute of Medical Research with the ultimate aim to improve the health of PNG Communities through the capacity building of our national research workforce.

More than 40 scientists and health professionals have passed through GIDRTP with a handful currently pursuing their honours, masters and doctoral degrees in well established institutions nationally and abroad.

In May this year, this training program ended, after five successful years of training PNG scientists in the field of medical research.

In January, 2005, PNGIMR was one of the recipients of this program as a result of its longstanding collaborative relationship with the Case Western Reserve University

(CWRU), in Cleveland, Ohio, USA.

This relationship was established in 1989 and focused on the study of Filariasis. However, through mid 1990's the IMR/CWRU program had expanded to include other infectious diseases: malaria, tuberculosis, HIV/ AIDS and others.

The need to employ well-trained staff to undertake and continue future research became increasingly apparent thus prompting the idea to initiating a training program that would contribute towards building local capacity to pursue future research into major health problems affecting the local communities in PNG.

At this point, it was decided that although maintenance of international collaboration was important, the most effective strategy would be to train PNG nationals to proactively participate and eventually take the lead in pursuing research into this major health concerns.

Improving the health of PNG Communities through the capacity building of the research workforce thus became the ultimate goal of the five year GIDRTP. The program was established in January, 2005 and was further supported through a collaborative effort between the PNGIMR, the University of Papua New Guinea (UPNG) and Case Western Reserve University.

The goals and objectives for this training program were designed to be relevant to the ways that the infectious disease affects the lives of the individuals and communities throughout urban and rural areas of PNG.

During the five year period (2005-2010), GIDRTP through PNGIMR provided the learning environment to enable bioscience, post graduates, medical students, and physicians to expand their capacity for contributing to infectious disease research and health care in PNG. The program is such that all 50 students were attached to one of the six PNGIMR research units and were getting on the job training while at the same time learning and gaining experience into research.

This in-country educational program saw that while it is important to maintain international collaborations to effect future advances, PNG infectious disease specialists, must acquire that basic skills needed to provide consistent health care, perform routine diagnoses, and develop strategies for translating the products of biomedical research into effective health care practices.

This is through using broad based educational experience in the

Story continued on pp. 12

Evaluation of Round 8 Malaria Grant

Following the successful completion of the so-called "Bednet Project", PNGIMR was tasked with another very important project: the evaluation of the Round 8 Malaria Grant from the Global Fund.

Over the next five years, over one hundred million USD from the Global Fund will be invested in scaling up malaria control interventions with the aim to dramatically reduce malaria morbidity and mortality in PNG. This includes the distribution of long-lasting insecticide treated mosquito nets, the introduction of artemisinin-based combination treatment (ACT) for malaria, the scaling-up of rapid diagnostic tests and microscopy, and advocacy and behaviour change communications for the prevention and response to malaria. The programme is implemented by the National Department of Health, Rotarians Against Malaria (RAM), Population Services International (PSI) and the Divine Word University/Diwai Pacific Ltd.

Since funding provided by the Global Fund is strictly performance-based, a thorough evaluation and program-supporting operational research are required. With its expertise in malaria research and the successful evaluation of Round 3, PNGIMR was the ideal institution to take over this responsible task.

The Round 8 evaluation plan developed by PNGIMR includes a variety of activities to assess the outcomes and impact of the National Malaria Control Program at the levels of the malaria parasites, the *Anopheles* vectors, the human hosts, the community at large as well as the health system.

Over the next five years, PNGIMR will conduct country-wide health

facility and household surveys, monitor mosquito behaviour, and establish Sentinel Sites in all four geographical regions of PNG.

For such a big task additional staff had to be hired. After a thorough selection process, the Malaria Control – or "MalCon" – Team in Goroka now comprises 35 staff members, including research scientists (with backgrounds as diverse as social sciences, journalism, or marine biology), nursing officers, research assistants, microscopists, data management and data entry staff, drivers, as well as a team of project managers. MalCon also works closely with the malaria lab in Goroka and the entomology and microscopy sections in Madang.

As first activities, Sentinel Sites are now being established. This includes continuous malaria surveillance in health centres and population censuses in their catchment areas. Currently, one team is working on a census around East Cape, in Milne Bay Province. At the same time, three teams are out in the field conducting the first country-wide health facility survey.

With the MalCon field teams visiting all 20 provinces at least once every year, we have started the most comprehensive data collection activity in the history of PNGIMR. But we are not only collecting data; our officers also carry the name of our institute to the remotest parts of the country and demonstrate to the communities how PNGIMR is contributing directly to improving the health of the people in all parts of PNG.

See Bednet story on ppp.9

Korean delegate visits IMR



Pictured: Janet Gara, a Scientific Officer with the HIV/STI lab introducing the delegate to what the lab does.

A team of delegations from South Korea visited IMR on the 16th of June.

Dr Clement Malau, secretary of the Department of Health led the delegation to the institute as well as other representatives from the NDoH and the provincial health division.

According to a representative from the provincial health division, this was a follow-up visit after a previous visit in July last year.

The delegation comprises of three South Korean and a representative from the World Health Organization regional office in Manila, Philippines.

The aim of their visit was to identify areas in strengthening systems in PNG's health facilities at the district levels.

They visited several areas including IMR.

At IMR they visited several laboratories to understand the different projects that the institute is currently doing and so was shown around the Michael Alpers Library.

Corporate Affairs & Support Services Update with Samson Akunaii



INFRASTRUCTURE DEVELOPMENT

1) Goroka It Upgrade

Divine Word University finally found time to come up to Goroka to upgrade the Goroka IT systems in Goroka in May after a lengthy delay of some important equipment which was held up in Port Moresby. The new upgrade is compatible with PNG ARNET which is being enjoyed by many of our academic and research Institutions in the country and is supported on the global scale through the ARNET system. The new system is similar to the Yagaum system but slightly different. The satellite dish and modem are the same, however the servers are more powerful and the storage capacity should be sufficient to last us the next five to ten years. The other difference is our connection speeds to the Internet. During the upgrade on the job training was also provided to the Goroka IT personnel including Mr. Thomas Adiguma, the IT Manager from Madang. It is hoped that over time, both the Goroka Campus and the Madang IMR campuses would be linked up through the Wide area network once the Yagaum operations shift to their location in town. There is still some work to be done to fully make the new system operational and the IT unit in Goroka is still busy trying polish up all the outstanding loose ends relating to the upgrade. Another positive happening regarding the IT upgrade saw the elevation of Gordon Warvi, former Data Manager in Madang elevated to take over the role of Information Communication Technology (ICT) Manager. (See related story on pp. 8)

2) Goroka Office Extension

The operations in Goroka has increased quite significantly in the last 18 months with major activities coming on line. This expansion has seen the increase in the recruitment of many new staff and the corresponding effect translating into acute shortage of office space to accommodate the increase in staff numbers. Additional office earmarked for this year has seen a slow start due to delays in finalising the architectural plans of the proposed office extension. The plans have now being finalised followed by an expression of interests sought from reputable contractors in a closed tendering process. The final task now rests with the Tenders Board and it is hope that the building works for the Goroka office

extension will begin in the later part of July 2010.

3) Madang Infrastructural Development

The land court case involving the Madang town land has now being finally put to rest when Mr. Michael Apie'e of UMBA Lawyers finally got the substantive matter before the National Court thrown out last Friday (25/06/2010) at the National Court sitting in Madang . This now paves the way for the Institute to proceed with its development plans on the town land and first up is the perimeter fencing which has already being outsourced and work should commence anytime. There are some finishing touches to be done by the earthmoving contractor, Amri Transport and we are assured that this will also be completed anytime. A ground breaking ceremony is being planned for the 16th July 2010, and important dignitaries and stakeholders would be invited to witness the occasion to be held on site. This ceremony will pave the way for the eventual development of the site.

4) Transport

The activities in Port Moresby has seen a steady increase in the last couple of months including the transiting of staff on field duties to other parts of the country. With the increase in the flow of personnel and cargoes has also put some pressure on the capacity of our small administrative office in Port Moresby to handle the increase flow of traffic. Give this scenario the management in its wisdom has decided to beef up the capacity of the Port Moresby office and has reassigned a Toyota 10 seater troop carrier from Maprik to Port Moresby. The vehicle was shipped from Wewak in mid June so it should be available and operational in Port Moresby by the first week of July. Disposal of old vehicles through Public Tender. The management has also plans to gradually re fleet the aging vehicle fleets. It has approved the disposal of the following vehicles through the public tender process and staff and the general public can make their bids.

ZMR 041	Toyota 10 seater	- Madang
ZMR 028	Toyota 10 seater	- Goroka
ZMR 030	Toyota Utility	- Goroka
ZMR 033	Toyota Hilux 4x4	- Madang
ZMR 073	Mazda Bravo 4x4	- Goroka
ZMR 041	Toyota 10 seater	- Madang

Corporate Affairs & Support Services Update with Samson Akunaii

The Tender is being made publicly available so members of the public can also apply.

5) PNGIMR Supply & Tenders Board (See story on pp. 11)

6) Bulk Fuel Tank Facility

Goroka Campus now has a bulk fuel tank facility. The tank can hold up to 4,500 litres of diesel and there is no need to get institute vehicles refuelled at service stations. This is an agreement that was successfully negotiated with Inter Oil and the way the system operates is that the fuel is resold to projects at a small margin, a lot less than what is being charged by the service stations to cover handling and administrative expenses. The introduction the bulk fuel facility has seen adramatic decline in fuel costs for Goroka. A similar arrangement is planned for the Madang campus but wont happen until the town set up is operational.

ADMINISTRATIVE OVER VIEW

In house Policy review:

The in house policy review originally scheduled for February this year did not eventuate due to the very bad condition of the Ramu highway and couldn't be convened any sooner due to some pressing issues. This meeting is now scheduled for the 19th and 20th July 2010. Staff from Maprik and Madang are expected to travel to Goroka on the 18th. Invitations will be sent to staff who would be represented at this meeting.

STAFF Seminars.

The Corporate Affairs and Support Services contributed positively in the recent induction involving the new members of staff for the National

Malaria Control Program. This induction program has been hailed as a success and as lead on from this successful participation, section heads are now scheduled to provide an overview of their roles and responsibilities and to generally update and inform our own colleagues on what they do and what they expect from staff generally should they require any assistance from them. A schedule has been developed with the seminar organisers in Goroka and the participation of key CASS staff is being sandwiched with scientific presentations. The key to this series of seminar as head of the Unit Mr. Samson Akunaii puts it is that " we at CASS must make our functions and services user friendly, firstly in supporting the core business of IMR, to our colleagues and to the wider community whom we interact with." A full induction is being planned for Madang which will include senior East Sepik staff and this seminar will include both new and long serving staff to update them on existing and new developments and happenings.

Administrative re arrangements.

LISA KANDI moves over from IPTi to take over the role left vacant by Gerham Kuma. Lisa is not new to the Institute and she will be ably assisted by Roslyn and Penina on the ground including Ulo the head of the Finance unit from Goroka and Eunice Wotene the Internal Auditor who will be making regular site visits. MARK BUKA has been designated to relocate to Goroka and this should eventuate upon his return from leave. The project management experience of Mark is expected to boost the capacity of the Finance unit in Goroka, especially as it relates to project management.

The IMR Nius is a quarterly publication of the Papua New Guinea Institute of Medical Research and is written and edited by Geraldine Vilakiva of the Institute's Informations and Communications Department. News contributors include PNGIMR management, Research Units and Departments including Madang and Maprik branches. If you would like to make a contribution to the newsletter or be included on our mailing list, please contact us at the following address:

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BRIEFS

IMR awards Graduants

THE PNG Institute of Medical Research had recently donated several science prizes to top students graduating from the University of Goroka (UOG) and the Highlands Regional School of Nursing respectively (HRSN).

Of the three awards, the one was given to the School of Nursing was for the Outstanding Granddaughter of the year, while two other awards were given to UOG to be awarded to students who performed outstandingly in the subjects of Biology and Chemistry.

Mother's Day Luncheon

LADIES at IMR took time out from their busy schedules to celebrate Mother's Day this year. This time, the celebration was at the Steak Haus restaurant, located at the edge of Goroka Township.

The small event was celebrated with lots of fun, and good food with the ladies exchanging gifts as part of the day.

IMR 3rd in Futsal Comp

IMR Epidemics female team has finished 3rd place after Chauka and Telikom teams in the Goroka Futsal competition this year.

Despite a new comer to the competition, the Epidemics finished third after going down to Telikom in the semi finals.

Rebecca Emori, captain of the Epidemics thanked the players for a successful season and commended them for the team effort and cooperation.

MalCon commence country wide health facility survey

By Justin Pulford

On May 31st two MalCon field teams departed IMR Goroka to conduct health facility surveys in Lufa and Okapa districts, EHP.

The primary aim of the survey, which will be conducted in health facilities across the country, is to assess the availability of malaria-related diagnostic tools and medicines as well as the quality of malaria management practice.

The health facility surveys are a component of the national malaria control program evaluation and will be conducted annually over a five year period.

The current survey is due to be completed prior to the introduction of the new national malaria treatment protocol and, as such, will provide the baseline for subsequent changes in diagnostics, medicine availability and malaria management practice to be measured against.

The survey teams completed an extensive training program in preparation for the health facility surveys. Included in the training program were lectures on the project background, malaria biology and epidemiology, and survey



research methodology, one-on-one and group practice using the survey instruments, question and answer time with experienced field workers, and pilot testing in a local health facility.

Brown Kaupa, one of the field team leaders and a new IMR staff member, described the pending health facility survey as "very exciting" and "a great opportunity to assess the quality of malaria management practice in health facilities across PNG".

Elsie Bilam, an IMR stalwart recently promoted to a research assistant role, also expressed great excitement at the prospect of visiting health facilities across the country:

"The survey research training we received was really excellent. I can't wait to put my new skills into practice".

See more malaria stories on pp. 4 & 9 >>>>>

New Heads for Data and IT Sections

THE Data and Statistics Unit and the Computing unit of IMR has new section heads looking after them.

Namarola Lote is the new section head for the Data and Statistics unit. He took over from William Yeka, who left the institute last year. For the Computing and IT unit, Gordon Warvi is the new IT manager. Before taking up his new role, Gordon was at IMR Madang, as the Data Manager..

Both are very happy with the news and thanked the management at IMR for entrusting to them those roles.

IMR staff attends Pneumococcal world meeting in Israel

By Willie Pomat

March 2010, the pneumococcal world met in Biblical Israel for a week-long meeting, to discuss anything and everything pneumococci.

The 7th International Symposium on Pneumococci and pneumococcal diseases (ISPPD 7) with the theme, 'a meeting of minds', began in earnest to beats of 44 gallon drums in accompaniment with rhythmic spoon beating and choreographic dance by Israeli Theatre company with supporting acts by singing children at registration.

This high energy crescendo welcome was preceded by the pneumococcal song, a song telling tales of the difficulties pneumococci continues to pose for human, yet one which as was pointed out by Dr Ron Dagan, the Chairman of the Organizing committee, pneumococci can be poetic.

Representing PNG and IMR specifically at the meeting were Sarah Moberley, Andrew Greenhill and William Pomat, who presented posters during the session. Also present were our collaborators, Anita van den Biggelaar and Deborah Lehmann. Anita, Andrew and Sarah all presented their posters to the international audience. Our trip to Israel was made possible through successfully winning 3 of the 58 Travel grants awards available to recipients around the world. Topics covered at the meeting were diverse, reflecting the diversity of pneumococci and how much we have yet to learnt about 'mans best friend'. The tales of the pneumococcus range from evolution, liason with man, immunity, interactions with other pathogens, treatment, and current and future vaccines candidates.

Serious scientific discussions were interspersed with light hearted banter culminating in the soccer match challenge for the Sputum Cup. The match was held on Jerusalem beach along the coast of Mediterranean Sea. Europe beat the Rest of the World by 2-1 to claim the rights to the sputum cup for the next two years. In the evening the galore dinner was well patronized with the up tempo music keeping everyone on their feet. The food was delightful, tasty and very delicious.

ISPPD is held every 2 years in countries with high research output on pneumococci and pneumococcal diseases. The next ISPPD will be held in 2012 in Brazil, where the rest of the world will have very little chance against the mighty Brazilians in the Sputum Cup. The science will however be as interesting, diverse and inspiring as the Brazilian environment.

(See additional story on pp. 15)



25 years of service

Audrey Michael or most known among IMR staff as Mama Audrey celebrated her silver jubilee, working for IMR on the 4th of June this year.

Colleagues and friends to put together a light refreshment and a cake was cut especially for her 25th anniversary.

During the celebration, Mama Audrey thanked the IMR staff and especially her section the Bacteriology section and their head Dr Andrew Greenhill for organizing the small ceremony.

She joined PNGIMR on the 4th of June 1985 after working for the Bacteriology section of Port Moresby General Hospital for ten years. Since then, she never regretted moving up here.

From the day she's been here, she has worked under many projects. The Meningitis project and the current PCV study are two of the projects she's been currently working on.

Asked about what keeps her going and working at IMR for the last 25 years, this is what she said.

"My family is my priority and one of the things that kept me going. Since my time here I've had lots of friends, the IMR is like a family to me and the staffs ere provides friendly atmosphere and it is an ideal environment to work in," she said. "I also love the climate of this place and most importantly the people. I had to find out myself that they are not as bad as I first thought."

Audrey Michael hopes to leave IMR at 2012 but she is willing to come back if the institution needs help as a consultant.

Utilization of bednets still low to curb malaria

Nationwide bednet distribution a success - but utilization still too low to curb malaria. In this article, Dr Manuel Hetzel, section head of the Malaria Control program at PNGIMR writes about the findings from the Bednet Project.

Every year, 600-700 people die from malaria in Papua New Guinea. This situation could be changed if everybody was protected from the bites of the tiny malaria-transmitting Anopheles mosquitoes. Since no vaccine is available against malaria yet, the best protection is a mosquito net that is used while sleeping at night when the Anopheles mosquitoes are active. The Global Fund to Fight AIDS, Tuberculosis and Malaria supported PNG

in the free distribution of mosquito nets between 2004 and 2009. The distribution program was then evaluated by PNGIMR in what was commonly called the "Bednet Project". This country-wide study revealed that 80% of all households in PNG own a mosquito net. By 2009, over 60% of all households even had one of the long-lasting insecticide treated nets, or LLIN. These nets are impregnated with a lasting insecticide which is harmless to humans, but deadly for mosquitoes. Over the last four years and with money from the Global Fund, the National Health Department and Rotary Against Malaria distributed 2.5 million such nets across PNG.

According to the IMR study, this large-scale distribution can be regarded a success. However, coverage still needs to increase to have a real impact on malaria. The study report which was recently presented to the



A Kainantu child receiving free treated mosquito nets.

Health Department also points out that the bednet distribution was not equally successful in all places. In about half the surveyed villages around the country, the target of reaching 80% of households with new LLINs was not achieved. "While in some villages, every house had a LLIN, some other places were completely missed out during distribution" says Gibson Gideon who led a team of researchers around the country.

"To cover left-out areas, increase household ownership, and replace old and torn nets, Rotarians Against Malaria and the Health Department are going to distribute more nets in the coming years" explains Leo Makita, the Health Department's malaria-advisor. However, one problem can not be solved by simply distributing more nets: too few people regularly use the mosquito net they own.

The PNGIMR survey teams found many nets still in their original package. In fact, less than 40% of the people surveyed had slept under a mosquito net the night before the survey.

Particularly in the Islands Region where malaria is a big problem people still do not use their nets. The PNGIMR study suggests that more awareness creation is necessary to explain people the benefits of mosquito nets. In particular, small children and pregnant women should sleep under a LLIN every night. But the study also challenges the people of PNG. "The government is providing an effective tool for free so people can protect themselves from malaria" says Mr. Makita, "but in the end it is the responsibility of each Papua New Guinean to protect themselves and their families from this deadly but preventable disease."

Colloquium receives major funding boost from Esso Highlands

Esso Highlands Limited, a subsidiary of Exxon Mobil and operator of the PNG LNG project, has thrown its support behind the Pneumonia Colloquium as major sponsor of the event. Managing Director Peter Graham said Esso Highlands Limited is pleased to support the colloquium and PNG IMR in their efforts to combat this disease.

In thanking Esso Highlands, chairman of the organizing committee William Pomat, said the money will go towards the preparation of the event particularly towards paying

for transportation and accommodation arrangements for the village reporters from Tari and Asaro.

"The colloquium is very important and we thank Esso Highlands for their massive commitment it has shown to improving health in PNG through supporting such an event," he said. The August 23rd -26th event will be held in Goroka and will bring together over 300 participants from PNG and abroad, including health practitioners and researchers.

IMR Goroka upgrade IT Network



Collin Haili (left) assisting IT technicians from Divine Word University setting up the new dish at IMR Goroka.

By Gordon Warvi

Earlier in June, the IT division in Goroka began the anticipated upgrade of its server and network infrastructure. The plan included the upgrade of its main network cables, which run throughout the main hallway to each major wing within the office, and the upgrading of the servers, storage capacity and the Internet services.

The upgrade of the network infrastructure involved the changing of our normal CAT-5 (blue network cables) to, a faster capacity, fibre-optic cables. These cables service the Admin, Operational Research and Virology wings, and provide improved communication speeds between the different wings and the main servers in the IT room.

The other, and most substantial upgrade, was to the servers themselves. The Goroka branch now has 4 new virtual servers which handle user logins, access

to files, directories and resources (printers, scanners, etc...) and services (e.g. Internet and Email). Each server comes with 2 CPUs, approximately 400 Gigabytes (GB) storage space and 8GB RAM. Second to Divine Word University, we are also amongst the only research and academic

institutions in the country using a Storage Area Network (SAN) with 4 Terabytes (TB) of storage space. This is sufficient storage space to cater for our research needs in the coming five to ten years. Presently, we are only utilizing 1TB for our current usage.

Along with all of this we have also improved our Internet connection speeds. Being a part of the Papua New Guinea Academic and Research Network (PNGARNET), our new ISP has now been changed to Oceanic Broadband Solutions, an ISP based in Australia. Previously our ISPs were Datec - who took care of our email services and website hosting - and NewSAT, that provided the VSAT connection (512Kbps download/256Kbps download) to the Internet. Now, with only one ISP, we connect to the Internet (1024Kbps download/512Kbps upload), host our website and manage our own email server using Atmail.

ART report launched

The first large-scale study of people's experiences of living with HIV in PNG has been completed with its report launched recently.

The report is titled, "The ART of Living: the social experience of treatments for people living with HIV in Papua New Guinea" and explores the lives of people in PNG who have been living on antiretroviral therapies (ART) for more than two weeks.

This report is the result of a comprehensive study carried out by the PNGIMR in collaboration with the University of New South Wales and was done using the Institute's research trainees - the PNGIMR cadets (a group of ten early career HIV social researchers).

Dr Angela Kelly, the Principal Investigator of the study, said the project aimed at examining people's social experiences of ART, to explore stigma and the barriers and enabling factors for adherence to antiretroviral therapies.

"This includes understanding the sexual practices of those on ART, and also to understand the role of health care workers and families in the roll-out of treatments."

The study was carried out in six provinces - NCD, Southern Highlands, Western Highlands, Eastern Highlands, Simbu and Morobe and covered ART clinics, drop in centers and support group of People Living with HIV (PLHIV).

IMR supports idea of 2nd medical school

By Geraldine Vilakiva

The PNGIMR is in support of the idea by the PNG Medical and Health Sciences faculty at the University of Papua New Guinea to set up another medical school in Goroka.

Director of PNGIMR, Professor Siba said, it will be good to expose medical trainees to get experience in working in hospitals outside Port Moresby. He said the institute is prepared to assist the school in terms of technical training as well as providing lab exposure to students among other things.

Professor Siba made these statements during a visit from delegates from the PNG Medical and Health Sciences faculty to the institute in May, this year.



Delegates from the PNGMHS with Professor Peter Siba

The delegates were led by Sir Dr Isi Kevau, Dean of the faculty and Chairman of PNGMHS Dr Adolf Saweri.

During a brief address to the staff of the PNGIMR, Drs' Kevau and Saweri revealed that the school is aiming to set up a second medical school in Goroka, and will be based at the Goroka General Hospital. The school is aiming to enroll its first batch of fourth and fifth year students in 2013.

Talks have already taken place with various stakeholders in Goroka including the Goroka General Hospital, the PNG Institute of Medical Research (IMR), University of Goroka, the Provincial Administration among others.

IMR has new Supplies and Tenders Board



Pictured above are members of the new board taking their oath with by Provincial Senior Magistrate, his worship Mr Gami Madu at PNGIMR, Goroka.

The Institute now has a tender's board to deliberate on the procurement of goods and Services. The board was duly appointed by the Minister for Finance & Treasury in November 2008 and their appointment was gazetted as per National Gazette G236 published on the 11th December 2008. They was sworn in on Friday 2nd of July 2010, by the Provincial Senior Magistrate his worship Mr. Gami Madu. Members of the board includes;

Prof. Peter Siba – Chairman [Mr. Samson Akunaii alternate], Dr. Joe Apa – CEO, Goroka Base Hospital member [Mr. Michael Makao, alternate], Ben Haili – Director, Health , E.H.P. Administration, Naomi Yupae – E.H. Family Voice & IMR Council Member, Mathew Omena – IMR Lab Manager and Ulo Jasipa – IMR Finance Team Leader. The First Assistant Secretary – Accounting & Frameworks Division is a member and his Assistant Secretary from the Department of Finance is his alternate. The two representatives from the Department couldn't come for the swearing in and this formality will be completed when they find time to come before the next meeting. This committee will deliberate on procurement of all disposals of fixed assets. The PNGIMR Tenders and Supply Board can deliberate on matters up to a maximum of K 3million. Anything over this mark will be referred to the main Central Supply and Tenders Board in POM.

MANAGEMENT SERIES with Mathew Waram

MANAGE LIKE A SHEPHERD.

Hello readers, this is a new series written by one of our staff members. This is the first of many promising series on the topic of management. Please note that this writer is not from an expert in the area of management but have read much concerning the subject and with confidence assert that it will help whoever has the time to read, learn it's truth and apply it's wisdom.

What do you want from your employees? Loyalty? Excellence? If it's greatness you want, its greatness you must give. But how do I give greatness?

Find out how from this column over the next 7 Issues of the IMR Newsletter. Practice the seven principles covered in this Column over 7 issues, practice them and see for yourself the differences they make in your workers, in your business and most important in you.

Thank you for your potential team leaders, managers and leaders sparing portion of your busy schedule in reading digesting and applying.

Principle # 1. Know the Condition of your Employees.

If you want your employee to be great, productive, loyal and successful, the first step is to always know the condition of your flock. A manager can't manage what he doesn't know. So you have to make a point of knowing not just the status of the work, but also the status of your people. Many managers focus too much on their projects and not enough on their people. They are there with their flock-but not really. They're preoccupied with the work and not with the workers."

We put emphasis on this you for a simple reason that it's your people who get the job done. Your people are your greatest competitive advantage. Many managers will say they agree with this, but often they merely give lip service to the idea.

So to get started, it is imperative you get to know the condition of the employees one person at a time. At IMR or any organization for that matter, they are part of the same team, but they're individuals, and that's exactly how they will want to be treated. People are tired of being treated like a number. Each person who reports to you will want you to treat him or her not just

as an employee, but as an individual.

This specifically calls for you to take a personal interest in each of the people who reports directly to you. You need to discover their skills and interests. You need to know their goals and dreams; what motivates them when they walk through the door in the morning, what their careers ambitions and frustrations are. In other words, you have to make a point of knowing what are impacting them at the moment.

You may now be wondering ; "How am I supposed to learn that?"

Answer - By engaging your people on a regular basis. You will need to circulate amongst your employees on a regular basis. When you do, keep your eyes and ears open and ask lots of questions. Most importantly, follow through. If an employee requests time to take his child to the doctor, for example, the next time you see him, ask how the child is doing. As best as you can, keep up with what's going on in the lives of people. That sounds easy to do, but its next to impossible if you don't this last important point.

You have to really care about your people. You can go through all the right mechanics, but if you don't genuinely care about the people who report to you, you'll never be the kind of leader they'll drop everything to follow. If they're nothing but undisciplined, humbug, good for nothing employees to you, they'll never do their best work for you and they won't stay in your organization for long. It's old adage, but it's true: "people don't care how much you know until they know how much you care."

Thank you for reading and we meet again in our next issue, but before I close, let me bullet point what I have expressed above for you.

The Way of a Shepard.

1. Know the condition of your employees.
 - Follow the status of your people as well as the status of the work
 - Get to know your team, one member at a time
 - Engage your people on a regular basis
 - Keep your eyes and ears open, question, and follow through.

Fogarty ends after five years

Story continued from pp. 3

sciences, followed by specialized training in epidemiology, microbiology, pathology, diagnosis, disease management, ethical responsibilities, communication skills and information management.

"We want to train as many of our young scientists so that in the future they are the ones who will lead the institution and the country in medical research," said Professor Siba, Director of the PNGIMR recently.

Despite the program coming to its end in May this year, it has without doubt achieved its goal.

Not only had it trained PNG scientists but have also lifted the game for our national researchers and have opened up avenues for them to further advance their training in Masters and Doctoral awards in top international institutions in Australia, US, Japan, Switzerland among others.

Medical research is fundamental in developing countries and PNG is no exception, as this country needs to build more highly trained and seasoned PNG scientists to take up the fight to the next level not only in the field of medical and health research but also in into infectious diseases and other health-related fields as well.



Above: A group photo of the Fogarty interns of 2009.

New HIV drug resistance project begins

The HIV/STI laboratory of the PNG Institute of Medical Research is conducting a new study into the HIV drug resistance in the country.

The study is titled "an investigation into HIV drug resistance and subtype distribution in the Eastern and Western Highlands".

According to one of the study investigator Dr Claire Ryan, head of the HIV/STI lab, this study is the first of its kind to be conducted in PNG following the roll out of the antiretroviral therapy (ART) into the country's public health systems in 2006. Dr Ryan said since the massive roll-out program began, there had not been any real way of seeing whether or not people taking this therapy were responding to it.

"This is because the country has very limited monitoring systems in place to monitor and collect up-to-date information on the ART and to monitor the viral load of HIV positive that are on ART," she said. Persons on antiretroviral medicines are healthier as the medicines reduce the amount of virus in the body. However, if these drugs are not taken exactly as the doctor prescribes, then the virus can become resistant to them and the drugs will not work effectively in an infected person.

Dr Ryan explained that viruses that are resistant to the drugs can also be transmitted. There are different subtypes of HIV that causes AIDS and the new study is also trying to identify the HIV subtypes that people in PNG have.

This study is designed to see whether or not resistant HIV viruses are a problem in PNG and also to determine how viruses in PNG become resistant to the drugs. "We would like to find out whether people taking ART are resistant to the drug and if they are, what is the transmission rate," she added.



There are two arms to this study and will include 200 study patients from both the Michael Alpers Clinic in Goroka and Tininga Clinic in Mt Hagen.

The first arm will involve 100 patients, 50 from the Michael Alpers Clinic and the other 50 from the Tininga Clinic who will be newly diagnosed HIV patients and

are not yet on the ART drug. The second arm of the study will include 100 patients, 50 from the two clinics respectively, who already know that they are HIV positive and are on the ART. The participants from this arm of the study will be followed up after 12 months. Informed consent will be obtained from all the participants

and those who consented to take part in the study will go through an interview that will take 25-35 minutes.

The aim of the interview is to gather their demographic information, knowledge on HIV, CD4 cell counts, drug resistance, and social behaviors that may contribute to treatment adherence.

Dr Ryan said results from the study will be very useful in trying to work out how HIV is spreading around the country and also will help scientists who are trying to develop a vaccine to prevent HIV. "Information from this study will give up an estimate of how much drug resistant is in PNGwe will also take look into the

behavioral resistance, social experience and the biological component of the study," she said. The study will be completed next year and the Burnet Institute in Melbourne, Australia is supporting the study by providing technical assistance. The study is being funded by the National AIDS Council Secretariat under its Small funds category.

Staff Trainings this Quarter

EPIDEMIOLOGY & BIostatISTICS WORKSHOP



Dr Moberley assisting Fogarty student Wendy Kirarock during the workshop.

The Fogarty students had the Epi & Biostats training workshop on the 12th - 16th April 2010.

The main facilitator of the weeklong workshop was Dr. Sarah Moberley although she was assisted by Namarola Lote from the Statistic Unit on the session on statistics and William Pomat through the session

population indicators. This intend would help the students in their assignments and thesis.

The workshop ended with each student giving a five-minute oral presentation on the project they are doing.

on research ethics.

The training was aimed at equipping the students to better understand the importance of epidemiology and biostatistics and their roles in scientific research.

It also wanted to assist students to identify and develop different study designs for different researches and how to measure basic

Scientists train for new tech



Malaria lab staff learning how to use this new technology at the ORU conference room.

"A new assay to genotype *Plasmodium falciparum* parasites was recently transferred to the Malaria labs from the PNG IMR (Goroka and Madang).

Cristian Koepfli, PhD student at the Swiss Tropical and Public Health Institute, and working on malaria parasites in collaboration with the PNG-IMR, came for a few weeks in April 2010 to PNG, to train 6 PNG scientists to this technology.

Replacing the classic RFLP method (Restriction length polymorphisms), the new typing method, based on capillary electrophoresis, will provide a better discrimination of *P. falciparum* isolates, and will have a direct application for a better interpretation of clinical drug trials.

It is of great importance to be able to distinguish between new infection and recrudescence of parasites (synonymous of drug resistance) during the patients follow-up.

Mr Koepfli organized both theoretical and practical sessions with Dulcie, Livingstone, Jonah, Elisheba, Lincoln and Celine from the PCR to the analysis of the electrophoregrams data."

ORAL & POSTER PRESENTATION WORKSHOP FOGARTY

Fogarty students at PNGIMR Goroka branch, had a one day workshop on Oral and Poster Presentation on the 17th June and facilitated by Eddie Thomsen, a staff attached with the entomology lab of IMR in Madang and the Training officer.

The workshop was aimed at improving the Fogarty students' presentation skills in preparation for the PNG Medical, Biomedical & Social Sciences symposium which will be held in September, this year.

The one-day workshop was divided into two session, the morning session involved a lot of theory work while the latter part of the session was practical in which students were asked to design individual posters and how to transfer their thesis into slides preparations.

A Trip of a life time

By Willie Pomat

Visiting Israel was a golden opportunity to see Jerusalem, a holy city well known in Biblical History. I took a guided tour of Jerusalem on Thursday 17th March with Peter Jacoby, a collaborator in Perth, Western Australia. Jerusalem is approximately 45 minutes by car from Tel Aviv and we made the trip in good time, despite a couple of accidents along the way, with our guide informing us of each historical and important site along the way. Jerusalem is nestled on hilltop, very much a modern city and much, much cooler than Tel Aviv. Jerusalem's old city, the area we have heard and read in the Bible, is divided into 4 different sections, the Christian, Muslim, Jew and Armenian sections. The old Jerusalem is perhaps one of the oldest cities in the world, and definitely one of the well known. History is everywhere, as we made our entrance through the Christian section on the way to the Holy Sepulcher Church, a site Holy to Christians. The Holy Sepulcher Church holds the sites of Jesus' crucifixion, being cleansed with olive oil and myrr by Mary and his tomb. The tomb is an old blacken, limestone structure held together by iron scaffolding and surround by the Catholic Cathedral, the Greek Orthodox Church, a smaller Armenian Church.

From the Christian section, we walked through the Muslim section following the path Jesus is said to have carried the cross after condemnation to death near the Lion Gate. This path mainly runs through the Muslim section and is now lined with shops selling all forms of souvenirs and food. The Muslim section also holds the site of the Dome of the Rock, which houses the rock Abraham placed Isaac on to kill him as directed by God and the Golden Gate, the gate through which Jesus walked through on a donkey on what is now marked as Palm Sunday.



Willie Pomat with another participant in Jerusalem, Israel. The photo was taken overlooking the wailing wall and the Dome of Rock from Jewish quarters.

From the Muslim section, the Jewish section is a short walk away, with security/security gates dividing the two sections. This corridor leads directly to the Wailing Wall, a holy place for Jews and part of the remaining wall built by King Solomon. A visit to the Wailing Wall, with written messages of peace to place in the crevices of the stone wall is a must for any visitors and completes the visit to the holy site. Excavations in the Jewish section revealed the main street of Jerusalem during the Roman conquest with a huge mural depicting what may have occurred in that era.

Outside the old Jerusalem we visited the Garden of Gethsemane and Mt Olives then drove down hill more than 400metres below sea level to get to the Dead Sea. On the way we were shown the track used during the time of Jesus, while getting a view of city of Jericho. The Dead Sea, as the name suggests is devoid of all sea life, very salty and popular to tourists. Because of the salt concentration, everyone just floats around. The mud and salts of the sea are thought to have health benefits and a shop selling cosmetic products does a roaring trade. The Dead Sea also marks the border between Jordan and Israel. A trip to the Holy Land is a must see destination for Christians.

The IMR Nius is a quarterly publication of the Papua New Guinea Institute of Medical Research and is written and edited by Geraldine Vilakiva of the Institute's Informations and Communications Department. News contributors include PNGIMR management, Research Units and Departments including Madang and Maprik branches. If you would like to make a contribution to the newsletter or be included on our mailing list, please contact us at the following address:

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Don't burn it boys:
Bangan (BJ) supervising the BBQ at the IMR haswin during the futsal party



Do you swear.....?:
Prof Peter Siba reading the oath to one of the members of Supplies and Tenders Board

Let's eat:
Deputy Director-CASS, Mr Samson Akunaii with Naomi Yupae during the swearing in of the Tenders Board luncheon.



Breakfast time:
PASHIP team enjoying their breakfast before heading out to the project site in Oro Province.



Please to meet you:
Health Secretary Dr Clement Malau introducing a team of Korean Scientists to the IMR.



We hope your students like them:
Mrs Norries Pomat presenting gifts from the IMR to the University of Goroka graduating students.