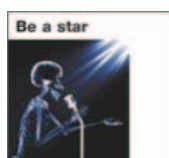




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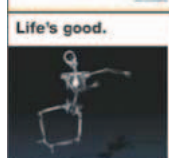
WORLD RADIOGRAPHY DAY



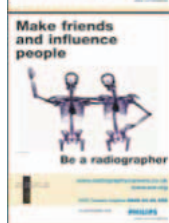
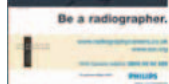
November 8th is World Radiography Day – a day to educate the public about medical radiation sciences and what radiographers actually do. World Radiography Day is an annual, international initiative which is intended to raise awareness and interest in radiography and radiotherapy as a career and to address the shortage of radiographers in the country.



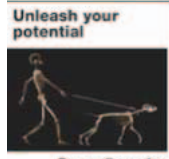
An excellent way to do this is to open up your Departments to the public on this day or stage displays highlighting the work of radiographers. The health game is more than just doctors and nurses. Radiographers are just one of many other professions playing a role in the everyday care of patients, obtaining X-rays to aid in their diagnosis or giving radiotherapy treatment to cancer patients. Radiographers are working at the forefront of medical technology using sophisticated machines such as CT and MRI to diagnose conditions accurately at earlier stages than ever.



World Radiography Day gives us an ideal opportunity to highlight one of those, 'behind the scenes' professions playing a vital part in the diagnosis and treatment of just about every medical and surgical condition. Radiographers work with some of the most specialised equipment used in the health service with new techniques and technology available every year that have a major impact on patient's treatment. World Radiography Day is also being used to encourage more people to consider a career as a radiographer. There are national and wide-world shortages of radiographers as imaging services have expanded and more staff is needed.



In the United Kingdom locally innovative ways have been found to tackle this such as the introduction of new roles to allow staff to make full use of their skills and expertise and to expand career development opportunities. Examples are radiographers who are performing diagnostic tests such as barium enemas or those reporting the results of x-ray films to identify broken bones. Assistant practitioner roles are also being introduced to take on some of the more routine tasks and allow radiographers to concentrate on the more specialist areas of their work.



Send us a report and pictures for the next Sinaran in December to share what happened in your department or what you have done for World Radiography Day 2007.

*The Editorial Committee
Sinaran Newsletter*



*Selamat Berpuasa Dan
Selamat Hari Raya Aidil Fitri
To All Our Muslim Friends
And Colleagues*

UPCOMING MSR EVENTS

1. FEB 2008
STUDY DAY / PSYCHEDELIC NIGHT
KUALA LUMPUR
2. MAC 2008
MSR AGM / SCIENTIFIC MEETING
MELAKA
3. SEP 2008
SINGAPORE SOCIETY OF RADIOGRAPHERS
JUBILEE CELEBRATIONS
SINGAPORE



OTHER EVENTS

7th ADVANCED NEURORADIOLOGY COURSE

1st – 2nd November 2007

Tan Tock Seng Hospital Singapore

(e mail: haslindah_salim@nni.com.sg)

UPDATE ON ANTI-AGEING

10th November 2007

MUTIARA HOTEL JOHOR BAHRU

(email: secretariat@costam.org.my)

ASIAN BREAST DISEASES ASSOCIATION COMBINED CONFERENCE

16th – 18th November 2007

Orchard Hotel Singapore

(Please see forms on pages 19-20)

16th Asian Congress of Radiological Technologists

15th – 18th November 2007

Chandigarh, India

(Please visit website to download forms and details

www.iart.org.in)

COMMENTS AND FEEDBACK FOR THE NEWSLETTER

We hope that you find this newsletter helpful and would appreciate member's comments and feedback so we may be able to improve and serve you better.

You may contact us through post at:

The Editor

**Malaysian Society of Radiographers
c/o Department of Radiotherapy and
Oncology Kuala Lumpur Hospital
Jalan Pahang 50586**

Or through email to

(Tn Hj Mahfuz Mohd Yusop)

mymahfuz@hotmail.com

Please include your full name and contact number (and a pseudonym if you wish to remain anonymous).

Those wishing to advertise in this newsletter on events, vacancies or other happenings relevant to the profession may also write in to the editor.

The Malaysian Society of Radiographers manages a yahoo group site online. Members who wish to join this group are requested to visit your group on the web at:

http://groups.yahoo.com/group/ms_radiographers/

You will have to register and sign in as a member to activate links to this site. Once you have logged on you will find easy access to other members and also be able to view instant information sent out to the rest of the group.

Do look out for our new website coming up soon!

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National Healthcare Group Diagnostics is a business unit of the National Healthcare Group (NHG). NHGD is the leading provider of laboratory and imaging services at the primary healthcare setting. With 15 static imaging centres, 2 mobile X-ray containers, 1 mobile mammography screening bus and 12 laboratories located within north-western region of Singapore, NHGD is committed to achieving excellence in quality. Our quality framework is driven by a set of quality principles and exists within an environment of continuous improvement and business excellence.

Radiographer

The Challenges

Reporting to the Manager, Radiography, you will perform general radiographic examinations and mammography, and be an integral part of the team that provides efficient and effective services to patients.

The Requirements

- Degree or Diploma in Radiography from a recognised institution.
- At least 2 years' relevant work experience. Experience in ultrasound would be an advantage.
- Should possess a strong sense of commitment and dedication, and be able to work well in a team or independently.
- Excellent interpersonal and communication skills.

Interested candidates are invited to send/fax/email a detailed resume stating your current & expected salaries, contact number and email address, along with a recent passport-sized photograph by **20 October 2007** to:

Human Resource Department
National Healthcare Group Pte Ltd
6 Commonwealth Lane
Level 6 GMTI Building
Singapore 149547
Fax: (65) 6496 6871
e mail: li_peng_yeo@nhg.com.sg

We regret to inform that only shortlisted candidates will be notified.



From the Secretary's Desk Report on the 22nd Singapore Malaysia Radiographers' Conference

By **Mr. Packya Narayanan Dassan**
e mail: ms_radiographer@yahoo.com

The 22nd Singapore Malaysia Radiographers' Conference took place from the 18th till the 19th August 2007. Malaysia was represented by 18 participants as listed below.

1. **Gina Gallyot (Speaker)**)
2. **Sripriya Manoharan (Speaker)**)
3. Felicia Kong)
4. Jayanthi Rajendran)
5. Sumathi Krishnaraj)
6. Goh Mey Lih – Kuching Specialist Hospital
7. Janet Ann Francis – Nilai Cancer Centre
8. Chen Lai Khoo – Hospital Pulau Pinang
9. Ravi Chanthriga Eturajulu)
10. **Subramaniam Ramanaidu (Speaker)**)
11. Subashini Vellayutha Pillai)
12. Bharani Kumar a/l Umayapatham)
13. Hafizah Binti Mohd Naharuddin)
14. Fadhilah Binti Ahmad)
15. Chung Mei Choo – UKM Student
16. Hj Mohd Zin Yusof – Chief Radiographer HKL and MSR President
17. Packya Narayanan Dassan – Lecturer MAHSA College and MSR Secretary
18. **Dr Mohd Hanafi Ali (Speaker)** – Lecturer UiTM and MSR Forward Planning

Official Opening Ceremony

The organising committee chose a most suitable location for the conference venue. The **Grand Plaza Park Hotel** on Coleman Street was just 5 minutes walk from the City Hall MRT station with numerous shops and huge shopping malls like Raffles City and Robinsons surrounding it. The hotel was very comfortable and welcoming with a large skylight in the lobby that brought in beautiful sunlight during the day and allowed stargazing at night.

The theme of this year's conference was **Reflect, Research, React** and the papers presented aptly complimented the theme as fellow colleagues from various disciplines shared their experiences and findings on specific research areas. **The Minister of State for Health Mr. Heng Chee How** graced the occasion as guest of honour. The EXCO of both Singapore and Malaysia Radiographers' Societies had the privilege of having an enlightening lunch discussion with the Minister and gained insight into the intricate details of healthcare management 'Singapore style'. In his opening speech Mr. Heng emphasised the role of radiographers in the care of patients in the hospital

framework and commended the role of the Singapore Society of Radiographers in perfecting extended roles in new modalities and responsibilities. He was also impressed with the participation of almost 240 participants from not only Singapore and Malaysia but also from Japan and Australia as the sharing of knowledge is evidence of continuous scientific research to achieve better patient care.

Our keynote speaker was the illustrious **Dr. Phillip W. Ballinger, Professor Emeritus from the Ohio State University, U.S.A.** That afternoon Dr. Ballinger presented the K. Vaithilingam Memorial Lecture titled "Digital Technology Requires that we Reflect, Research and React". Participants learnt first hand from Dr. Ballinger's unparalleled experience in clinical applications related to image quality and patient care. He highlighted the importance of having a radiology professional to evaluate the exposures on all patients, how we radiographers can track individual radiographer's exposures and how to take responsibility for inexperienced operators. Dr. Ballinger spoke not only with professional insight but with personal

understanding as a patient managed by a healthcare team during his stroke and leg fracture episodes. At the end of the conference Dr. Ballinger signed copies of several of his publications namely the Merrill's Textbook on Radiographic Positioning and Merrill's Atlas.

There were 7 theme papers presented covering topics ranging from Magnetic Resonance Imaging (MRI) Contrast Agents, Coronary CTA, Radiation Protection, Fetal MRI to Biological Imaging in Radiation Oncology. Conference delegates received valuable clinical and practical experience from these speakers.

Theme paper presentation

Our Malaysian delegate **Dr. Mohd. Hanafi Ali from the Faculty of Health Sciences, Universiti Teknologi MARA (UiTM)** began the theme paper session with his pilot study on **the Effects of the increase of the Quadriceps Angle to the Anterior Cruciate Ligament (ACL) tear**. From his study Dr. Hanafi has come to the conclusion that using MRI images of the ACL and measurement of angle of the quadriceps is essential so that ACL injury can be prevented especially among athletes.

Principal Radiographer Christopher Au from the National University Hospital Singapore highlighted the importance of gadolinium containing contrast media in MRI procedures to evaluate sinister looking lesions seen on non-enhanced MRI images. However he stressed that caution has to be practiced by each MRI imaging site to formulate a plan on how to manage contrast administrations to patients at risk especially patients with renal impairment who may develop nephrogenic systemic fibrosis (NSF) after injection and also for patients before and after liver transplants.

The current buzz word in Radiation Oncology Application involves the development of Biological Imaging modalities and this was emphasised in the study conducted by **Mr. Loi Chow Ming a radiation therapist at the National Cancer Centre in Singapore**. Mr. Loi conducted an evidence based study via literature review. According to his study the improved biological imaging capability of nuclear MRI, spectroscopy and Positron Emission Tomography (PET) provides clinically valuable information to identify the hypoxic tumour clonogens that are resistant to radiation doses thus providing significant understanding of tumour responses to radiation that further enhance the success of Intensity Modulated Radiotherapy (IMRT).

Mr. John Robinson, the Undergraduate Program Coordinator from the University of Sydney, Australia presented a paper focusing on the challenges faced by the Medical Radiation Science (MRS) and its' professionals. His paper explored the

relevance of the conference theme in an educational and professional context as to where the MRS profession was heading and why it was taking such a long time to reach its' goals. He theorized on whether it was due to a loss of commitment from the members or was it due to the many real and virtual challenges faced in healthcare delivery.

Next we listened to **Ms. Lydia Tan Kheng Lui a Modality Leader from the Singapore General Hospital** who spoke on the importance of the radiographer's role, skill and experience in coronary Computed Tomography Angiogram (CTA) using the dual source Computed Tomography (CT) scanner. She came to a conclusion that with dual source CT scanner the radiographers can make a difference in producing good image quality that would increase the confidence of diagnosis by implementing correct technique and principles of coronary CTA. She gave good examples of poor techniques that could be easily rectified.

We also had the privilege of listening to **Mr. Edmund Arozoo, Senior Radiation Protection Officer for the Environment Protection Authority of South Australia**. Mr. Arozoo stressed that stringent quality assurance in mammography is essential to ensure that high level diagnostic accuracy is maintained. The recent change in screen / film combination a current method of compliance testing of the AEC (automatic exposure control systems) has shown some shortcomings which resulted in images of certain breast shapes and sizes being underexposed. His investigations further showed a design flaw in the construction of the AEC setup in a particular mammography unit. He goes on to provide suggestions for corrective modifications to the units.

The final theme paper was from **Ms. Tan Ker Sin from the Kandang Kerbau Women's & Children's Hospital in Singapore (KKH)**. Ms. Tan is part of a team that performs Fetal MRI and shared her experiences with us. Her paper focused on the effectiveness of using MRI in depicting fetal anatomy and abnormalities as compared to obstetric ultrasound. Many of her case studies showed that MRI demonstrated abnormalities better than ultrasounds. However she concluded that it is too early to predict MRI replacing ultrasounds. At present fetal MRI complements the role of obstetric ultrasound for the assessment of fetal health.

Banquet Dinner

This ended the Saturday session and we adjourned for cocktails and dinner. The banquet dinner setting was very elegant and many ladies arrived dressed in their cocktail dresses or traditional costumes and gentlemen were in smart suits. Radiographers clearly showed they were a well-dressed lot! The food was good and the entertainment even better. Staff of the National Cancer

Society of Malaysia performed an energetic modern dance to the tune of Shakira's "La Tortura" and Mr. Tom Ang from Singapore General Hospital performed magic tricks which included elevating a table and creating bursts of fire. The Social Committee led by Noel Tan kept the crowd entertained and we had many laughs with the impromptu singing of "Sukiyaki" from the Japanese delegates and scavenger hunts. The dinner ended at 11p.m and delegates got together for group photos for remembrance.

Student presentations

The scientific session resumed early on Sunday morning and there were a total of 12 proffered papers. The student conference was held at 8.30 am that morning and the panel of judges consisted of Dr. Phillip Ballinger, Mr. Vincent Tan the Academic Chairman of the Singapore Society of Radiographers and Dr. Mohd Hanafi Ali. A total of 5 students presented their final year study.

Ms. Shi a radiation therapist at the Tan Tock Seng Hospital undergoing the undergraduate programme of the School of Medical Radiation Sciences at the University of Sydney presented a paper that surveyed the perceptions of a radiation therapist-led treatment reviews programme in Singapore. Her paper was to determine whether Radiation Therapists (RT's) and Radiation Oncologists (RO's) in Singapore perceive RT's as capable of leading treatment reviews and whether they support this role development. Questionnaires were circulated to collect data and the level of agreement between the RT's and RO's were measured. Her study reached the conclusion that both RO's and RT's in Singapore think that RT's are capable of leading treatment reviews and both support this role development of radiation therapists in Singapore.

Next Ms. Toh from the National University Hospital of Singapore and an undergraduate of the School of Medical Radiation Sciences at the University of Sydney presented a paper that investigated the attitudes and opinions of radiographers on performing intravenous contrast injections in the Greater Sydney Metropolitan Area. Her results showed that radiographers from private practice were more in favour of performing injections as it would greatly aid their department workflow and patient throughput. However there were concerns about the medico-legal implications of this added responsibility. Suggestions were for standardised accredited training to adequately prepare radiographers to take on this extended role.

Ms. Chen also from the National University Hospital of Singapore and an undergraduate of the School of Medical Radiation Sciences at the University of Sydney presented a paper investigating whether the traditional field boundaries for radiotherapy of breast

cancer guaranteed full dose to the axillary lymph nodes. Her study conducted with 7 patients established that if there is intent to irradiate the entire axillary volume then the axillary region should be delineated on CT's for accurate design of radiation fields. She recommended breast IMRT for adequate and homogenous distribution to the axillary volume.

Ms. Lee a student of the School of Medical Radiation Sciences at the University of Sydney presented a case study of the effects of exposure factors and algorithms on the contrast-to-noise-ratio in abdominal radiography with the Agfa computed radiography (CR) system on a patient-equivalent-phantom (PEP). The rationale of the study is that in computed radiography there is a separation of image acquisition from the subsequent image display as a result of the processing algorithms and the contrast-to-noise-ratio (CNR) is a useful indicator of image quality, which can help to evaluate the effect of exposure factors and algorithms on images. However Ms. Lee advised that caution has to be used when using the algorithms as the sole indicator of image quality.

The final student paper was presented by **Mr. Ler a diagnostic radiographer from the National University Hospital who pursued his studies at the Nanyang Polytechnic**. Mr. Ler proposed an educational package of basic radiation knowledge for staff to reduce misconceptions and anxiety among hospital staff especially newcomers with regards to medical radiation. Further packages in multi-lingual formats are advantageous for foreign users and also for public education.

The winners of the student conference were Ms. Chen and Ms. Lee representing the radiation therapy and medical imaging fields respectively.

Scientific Session

We had a short tea break before the start of the proffered paper session that began on the dot at 10.20 a.m. **Principal Radiographer Mr. Salem Koh from Kandang Kerbau Women's & Children's Hospital** shared his experiences on MRI-Guided Focused Ultrasound Ablation of Uterine Fibroids. His study undertook to evaluate the short-term efficacy and safety of this procedure as KKH is the first hospital in South East Asia to offer this procedure. Advantages of the procedure was that it was well-tolerated with minimal discomfort and allowed patients to return to normal activity after treatment as compared to other current treatment methods such as myomectomy, uterine artery embolisation and hysterectomy. Furthermore it is an out-patient service and provides good symptomatic relief to more than 90% of patients with least side effects and risks.

The second speaker of the morning was our Malaysian representative **Ms. Gina Gallyot, Chief Radiation Therapist from the National Cancer Society of Malaysia**. Ms. Gallyot gave a report on her organisations recent community event called Relay For Life. She spoke on how it began, how it is used as a form of cancer awareness in the community, to celebrate cancer survivorship and to raise funds for research to find more cures for cancer. Such an event acknowledges not only cancer patients, but all survivors, caregivers and healthcare professionals united in the battle against a disease that takes so much away. RFL supporters share a vision of a day when cancer will be just a mere chronic illness and not a killer disease. Her presentation was very emotional and gave us all a deeper insight into the cancer patient's struggle.

Next we heard from **Ms. Joline Chua, a Radiation Therapist from Singapore's National Cancer Centre**. She presented her investigation results of the dosimetric effects of aneurysm clips on stereotactic radiosurgery. The findings of her in-depth study are that the foreign object such as the aneurysm clip reduced the dose received due to radiation attenuation behind the clip. So concern arises due to the close proximity of brain structures and the small treatment area in comparison to the size of the clip resulting in a significant influence on the dose distribution. Furthermore the study also highlighted that these dose reductions could not be predicted correctly by the present planning system and simulation data.

Ms. Laraya representing her team from the **National Healthcare Group (NGH) Diagnostics in Singapore** shared how the qualified sonographers in the team worked with remote supervision of a Radiologist. Ultrasound images are sent through NGH network to remote workstations of the Radiologist and images are stored at the NGH Group Diagnostics Primary Data Center (PDC). Request forms were scanned in the Radiology Information Systems (RIS) and a Skype communication system was established to enable direct communication. Sonographers also had regular scanning sessions with Radiologists every 6 months to ensure competency and build rapport. This arrangement was significant in supporting reduced hospital visits by the patients who can now obtain Ultrasound services at the primary healthcare level.

Mr. Kazuyuki Abe from the Japanese Society of Medical Management at the Saga Medical School Hospital presented a very comprehensive paper analysing the index of medical economical effect by PACS construction. Arriving at the correct index would improve the hospital function and reduce investment and running costs. Mr. Kazuyuki requested the cooperation of both the SSR and MSR in his further investigation. He feels that the need for this investigation is necessary as healthcare services in

Japan move from analog to digital. The main benefit of having a PACS system is that there is a simultaneous viewing of an image in multiple locations. Other advantages in the utilization of PACS are that it increases consultation efficiency, reduces film costs, minimizes medical disputes and overall improves the image of the hospital.

Mr. Edmund Arozoo took to the podium again to brief on us on a tale of two CT's just like the Shakespearean play. His paper examined the CT scanning practices of 2 centers with identical CT Scanners and workflow systems and how dose saving implications were implemented. The ever increasing use of CT-Scanning in Medical Imaging and the resultant radiation dose has its implications to the general population. Therefore Mr. Arozoo concluded that delivering the lowest dose achievable is not only with having compliant apparatus used by licensed operators but the effective and efficient use of the equipment through best practices by the imaging technologist. There is a huge potential for dose reduction to the population through just a little time and effort.

We then had the privilege to learn from the distinguished **Mr. Seiji Nishio, Associate Professor from the Faculty of Health Science, Komazawa University**. The professor delivered findings of a study to estimate the absorbed dose of the mammary gland by measuring the radiographic density of the mammogram. He used several types of minced meat phantom and copper sheets and they were exposed by appropriate mAs values. The conclusion was sufficient to determine that the resultant correlation enables the absorbed dose to be estimated from the density and contrast of the measured dose in each exposure factor.

As the morning progressed the participants' attention never wavered as the topics covered a multitude of disciplines and experiences. It was the best learning platform as we learnt from a myriad of speakers each an expert in their respective fields. Attending a conference is not only about the good food and networking opportunities it is a unique opportunity to gather an abundance of knowledge that some pay thousands of dollars for and spend countless lecture hours on. Here we benefit at such an affordable cost and receive concise information for practical application.

Malaysian presenter **Ms. Sripriya Manoharan, Senior Radiation Therapist from the National Cancer Society of Malaysia** continued the session with her paper presentation on the comparison of Stage 2 Nasopharyngeal Carcinoma treatment techniques. She discussed 2 different techniques employed by the 2 different consultant radiotherapists at the center she worked and the rate of recurrence and resultant treatment effectiveness. Through her observation she

concludes that the technique which gives patients less side effects is comparable in its effectiveness to deliver an accurate tumor eliminating dose. This preferred technique also reduces human error and additional stress on the radiation therapist delivering the daily treatment as they also have to counsel and console patients. There is also reduced cost for patients and increased accuracy in this chosen technique.

Later **Ms. Kwan Jin Ee** from **National Healthcare Group Diagnostics** highlighted NHGD's Filmless Journey. In 2006 NHGD completed its project to convert all its X-ray departments from conventional film to computerized radiography. A centralized RIS and PACS were set up which connected all the satellite X-Ray clinics to the PDC and to the reporting centers located in institutions. This set up is the first of its kind to be employed in primary healthcare in Singapore. The advantages are increased efficiency and productivity as well as reduced costs. There is also increased convenience to patients for example a radiologist reporting which used to take 3 days with conventional film now could be accomplished in an hour. To date NHGD has implemented CR in 15 satellite X-Ray centers.

This was followed by another Malaysian speaker **Mr. Subramaniam Ramanaidu, Medical Imaging Program Head at the University Malaya Medical Center**. Mr. Subramaniam brought forward interesting issues connected to the assessment of radiography students especially the management of failing students in clinical practice. Clinical competence is essential to ensure that student radiographers graduate to become safe practitioners with good attitudes and professionalism. Clinical practice educators (CPE's) find it hard to assess students even with specific guidelines as some perform very badly. He stressed that CPE's had a duty as gate keepers of the profession to ensure patients are not put at risk at the hands of incompetent students who do well theoretically but fail miserably at clinical levels.

Mr. Gary Tan, Administration Manager at the Department of Radiology Singapore General Hospital was the next presenter and delivered a most energetic paper controversially titled *The Chameleon*. He discussed the ability of the modern radiographer to change and adapt to the world of rapidly changing technology and ever increasing customer orientation. He believes what is crucial is developing the sensitivity to cope with responses to rapid changes and constantly review not just training curriculum needs but quality issues of everyday practice. As usual he manages to touch on very pertinent current issues relative to the expanding role of the radiographer.

The final speaker of the day was **Mr. Joe Li a radiographer from the National University Hospital in Singapore**. He presented a paper that reviewed the current MRI pulse sequence on knee cartilage imaging. According to his study there are many pulse sequences for MRI knee cartilage imaging and each has its unique property and sensitivity in presenting specific pathology. This presentation compared and discussed the various sequences but focused on the efficacy in the practical routine practical clinical examination. He showed various examples of images acquired from GE Sigma 1.5T and Siemens Symphony 1.5T scanners to emphasis better patient management.

That concluded the scientific session and after the student prizes were awarded there was also recognition for best medical imaging paper and radiation therapy paper. Mr. Nishio took the former and Ms. Joline Chua the latter. **Best poster presentation** went to the team from Department of Diagnostic Radiology Singapore General Hospital comprising Goh SY, Heng I, Wong A and Chen XM with their poster entitled **Suspicious Palpable Breast Masses – Malignant or Otherwise?**

Closing ceremony

Before the final speeches and exchange of gifts were made Mr. Noel Tan who was also Chairman of the Golden Jubilee Project 2008 treated us to a multimedia slide presentation comprising of all the photos taken up to that moment and inviting us to return for the Jubilee celebration next year. We marveled how he and his team were able to put the presentation together at such short notice and edit the photos to perfection. Once again, congratulations to the entire organising committee for a memorable event.

Special recognition was given to the Organising Committee for putting together such a smooth event and for fantastic cooperation and teamwork extraordinaire. The committee was made up of 90% students and showed true leadership qualities being passed on to the future leaders of the Society something we must emulate in our future meetings.

After the closing lunch where contact numbers were exchanged and promises to meet up again next year were heard over many tables, the delegates proceeded to check out of the hotel and make their way back to their respective countries and destinations. The light drizzle that accompanied the farewells and parting words symbolized the bittersweet parting. Personally I have attended many conferences and seminars and each has left a lasting impact on me and how much I value being a radiographer. I certainly look forward to the next SMRC in Singapore in 2008. In fact I may just go and book my plane ticket now!

FROM A STUDENT'S PERSPECTIVE

By **Ms. Subashini V. Pillai**

Medical Imaging Diploma Programme, 2nd Year, MAHSA College
e mail: xsuba79x@yahoo.com

The 22nd Singapore-Malaysia Radiographers Conference was my first conference out of Malaysia and else then meeting Prof. Philip Ballinger, I had no idea what to expect. The bus ride to and from Singapore was exhausting but after two days at the conference, I'd say it was definitely worth it.

I was not alone on this expedition, 3 other fellow students accompanied me. They were Mr. Bharani Kumar, Ms. Hafizah binti Mohd Naharuddin and Ms. Fadhilah binti Ahmad. We are all 2nd Year students at MAHSA College Kuala Lumpur.

As students we were lucky to pay only S\$120 as a reduction from the full cost of S\$200. Though my savings would be depleted budgeting for this conference, after hearing so much about it from Mr. Packya my lecturer, I just had to be there to experience it.

The lecture by Prof. Philip Ballinger was not only educational but also inspiring and motivating. Although he had suffered from a stroke after his retirement, his spirit remains high and he has achieved so much without being hindered. It makes an able bodied person think what he/she can achieve without making excuses.

There was also a section where papers were presented by students from Singapore. It was nice to be able to hear from

the students. After listening to them, I realised I had a long way to go in Radiography. I also met some Japanese students and even though language was a barrier, I did somehow manage a conversation with them.

"All work and no play make dull Radiographers". The banquet Saturday night allowed us to let our hair down and enjoy each other's company. The party atmosphere was all around. Age was not a barrier for the young and the not so young we all had a blast. At the end of the conference, I had a wonderful time, gained so much knowledge and met new interesting people.

The highlight was of course when I got Prof. Ballinger to sign my Merrill's Pocket Guide to Radiography! I shall treasure it forever.

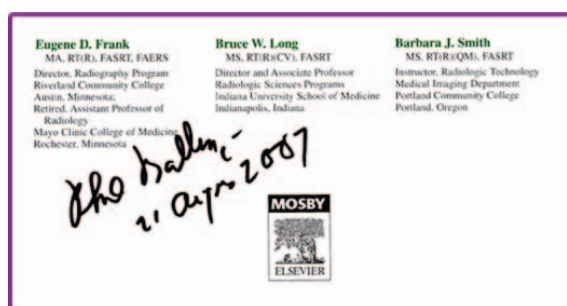
Finally the greatest impact to me from my meeting with radiographers from Singapore would be their wealth of information which has helped them improve their practices with their great attitude and good equipment.

I'm already looking forward to the next joint conference and I hope to see more Malaysians there especially student radiographers.

MAHSA Students with MSR President
Tuan Hj. Mohd. Zin and Prof Ballinger



MAHSA Students with students from Japan



Prof Ballinger signature on my textbook



UPDATE ON CONTRAST MEDIA STUDY DAY CITITEL EXPRESS HOTEL KUALA LUMPUR 8TH OF SEPTEMBER 2007 AT 2 PM

By **Ms. Sabrina binti Ali Pichai**
Student of MAHSA College
e mail: rd_sabrina@yahoo.com

There were about 120 participants consisting of radiographers and radiography students from MAHSA College. The study day was divided into two sessions.

The first speaker was Dr. Mohd Azaldin Bin Nor. He is currently a Consultant Radiologist at Damai Service Hospital and part-time lecturer and examiner at Fakulti Sains Kesihatan Bersekutu (FKSB), Universiti Kebangsaan Malaysia (UKM) for the Diagnostic Imaging and Radiotherapy Programme. He presented a paper on history and properties of Contrast Media (CM), the usage of CM in clinical imaging especially in MRI (Magnetic Resonance Imaging), indications and contrast indication and CM reactions and adverse effects.

I felt that it was a very comprehensive lecture as it covered topics from attenuation, natural tissue contrast, different types of CM (water soluble and suspension types), the classification and development of iodinated CM to the comparison of ionic and non-ionic CM.

Even though he gave us a detailed explanation on toxicity and adverse reactions I found it very interesting even if most of the time I could not fully absorb all the details as there were lots of new words and medical terms. However this made us all curious to find out more about contrast media applications and their side effects in detail especially for contrast induced nephropathy. Since we will one day be dealing with real patients it was very useful to learn about premedication and risk groups too.

The second speaker was En. Mazli Mohamad Zin a Senior Radiographer specialising in Magnetic Resonance Angiography (MRA) attached to the Radiology Department of Hospital Universiti Kebangsaan Malaysia (HUKM). He enlightened us about his experiences using older type equipment in contrast to the latest equipment available in the angiography rooms there mainly the Siemens Magnetom Vision 1.5 Tesla (installed in 1997) and the Siemens Magnetom Avanto 1.5 Tesla (installed in 2007). We also learnt about patient preparation before, during, and after examination for 2 different techniques which were the care bolus technique and the test bolus technique, this was very informative and interesting to us students as it stressed on different breathing instructions to patients. There was a lot of physics involved with calculation of delay time and post processing procedures. The most valuable points we received were on the limitations of the MRA examinations with relation to claustrophobic patients, wrong calculation of delay time, accidental cutting off of renal arteries during post processing and over estimation of renal artery stenosis.

After the tea break at about 4.30pm when we entered the seminar room we were given a sheet of paper. It was a quiz! There were 20 questions which were very tough to answer but we tried our best to answer. Time was ticking and everyone was nervous whether the answers would be correct. They collected our papers and the next session started with Mr. Faizi Kanan (Product Manager of IDS Marketing).

Mr. Faizi Kanan has been Product Manager with IDS Marketing since 2004 and he gave us a talk on the latest type of CM for sonography called "SonoVue" with the Micro Bubbles technology. SonoVue is for use with ultrasound imaging to enhance the echogenicity of the blood, which results in an improved signal to noise ratio. SonoVue should only be used in patients where study without contrast enhancement is

inconclusive. This CM is currently not used in Malaysia but we found it worthwhile to discover its properties and actions.

He also highlighted the roles of osmolality and viscosity in contrast media induced nephropathy. This was a continuation from Dr Azaldin's paper about the correlation between viscosity and osmolality with contrast media, hence it gave us a much clearer view about contrast media and its adverse effects.

Then they announced the 4 winners with the highest score of the quiz (which I secretly thought none of us students had a hope of winning!). However when they announced the winners we were so surprised to learn that the first place went to one of my classmates from MAHSA College, Ms. Aina Kamilah binti Mat Senin. Furthermore out of the 4 winners 3 of them were from MAHSA College. It was a very special day for us. Most of the participants for this Study Day were students from MAHSA College, so it was almost like a MAHSA Student Reunion Day!

Here is the list of winners from MAHSA College, our achievement must definitely also be due to the 6 hours of lectures we had prior to the Study Day.

1st prize : Ms. Aina Kamilah bt. Mat Senin
2nd prize : Ms. Kohgila a/p Raman
4th prize : Ms. Sabrina bt. Ali Pichai

We each received a gift of anatomical markers from IDS Marketing.

The final speaker was Ms. Chan Lai Khuan better known as the 'iron lady' of the Malaysian Society of Radiographers. She gave us such a splendid presentation titled 'Do you know?' It focused mostly the radiographer's role in patient care and patient management and the storage of drugs. The most important thing Ms. Chan made us realise was that even a small mistake can put a patient's life in danger. For example, if a patient did not receive any explanation on the examination that they will be going through and the effects they might experience they might not be fully prepared to undergo the examination and the radiographer may not be able to handle any emergency that arose from the adverse reaction. This made me realise that communication with the patient and their relatives are very important and that radiation protection is a must to further prevent any harm to the patient, their relatives, our co-workers and the general public.

This study day has given me and my fellow course mates a lot of information which we could not have found over the internet or in textbooks, because it was firsthand experience shared by real people doing their jobs everyday. We really appreciate the Malaysian Society of Radiographers for organising such an event. I hope in the future there will be more student radiographer participants from all the other colleges in Malaysia. Truly, you won't regret attending these study days. All of us went back home with a lot of new information to process in our minds and we made a promise to ourselves to apply it in our practices when we join the work force in the future. We make this promise to avoid mistakes and to save patients lives.

I thank my lecturer Mr. Packya for encouraging me to write this article and the Editorial Committee of the Sinaran Newsletter for including it in this publication.

Last but not least, Happy 50th Independence Day and Happy Fasting Month.



Report on the 17th COSTAM Annual Public Lecture 2007

The Confederation of Scientific and Technological Associations (**COSTAM**) held its 17th Annual Public Lecture on 28th July 2007 at the Best Western Premier Seri Pacific, Jalan Putra, Kuala Lumpur.

YB Datuk Dr Seri Chua Soi Lek, Minister of Health Malaysia graced the occasion and delivered the lecture titled Health Issues in Malaysia.

In his lecture Datuk Seri brought to our attention that the World Health Organization (WHO) and the World Bank credit our health system with its remarkable achievements especially in primary care services. Malaysia has often been referred as a model to other developing nations to emulate. This is due to the improvement in almost all the macro-indicators for example premature mortality, low birth weight and deaths due to chronic diseases in our country, which are used worldwide to reflect the health status of the people.

Since our independence in 1957 there has been a dramatic reduction in mortality rates and increasing life expectancy at birth in our nation. Many factors contribute to these statistics, mainly basic immunization for infants and outreach healthcare services in rural areas.

However Datuk Seri also stressed that the nation had to tackle issues in providing better healthcare with the rapid developments in modern technology and consumer demands. There are changes in disease burden and pattern due to lifestyle changes that affect the nation. The nation needs to look at these challenges from all angles including harnessing health technology, maximizing the role of the private sector and non-governmental organizations and strengthening the health management information system.

With all these in mind the Ministry of Health at the onset of the 9th Malaysia Plan has a vision to achieve a healthy and wealthy nation by outlining the country's priorities and implementing them. Six major goals have been set, they are:

1. preventing and reducing disease burden,
2. enhancing healthcare delivery system,
3. optimizing financial and human resources,
4. enhancing research and development,
5. managing crisis and disasters effectively and
6. strengthening health information management systems

We as radiographers all fall into this framework and Datuk Seri mentioned the importance of our roles. So we must take the lead from here and together work towards better healthcare service for our country and for humanity.

Before the dinner talk commenced COSTAM held their AGM with some changes in the previous line-up notably the change in the President's post. Academician Tan Sri Datuk Dr. Augustine Ong declined re-election after serving for more than 25 years.

Below is the new **COSTAM EXECUTIVE COMMITTEE** for the term 2007/2008.

As a member of the association we were represented by Tuan Hj. Mohd Zin Yusof and Dr. Mohd. Hanafi Ali at the AGM.

We are proud to acknowledge Dr. Hanafi's election to the Executive Council.

President	:	Prof. Dr. Mohd Ismail Noor Malaysian Association for the Study of Obesity (MASO)
Deputy President	:	Prof. Dr. Ir. Ruslan Hassan The Technological Association of Malaysia (TAM)
Vice President	:	Dr. Wan Noordin Wan Daud Agriculture Institute of Malaysia (AIM)
Vice President	:	Datuk Prof. Madya. Dr. Abu Bakar Bin Mohamad Diah Persatuan Konkrit Malaysia (PERKOM)
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Hon. Asst. Secretary	:	Prof. Madya. Dr. Norimah A. Karim Malaysian Association for the Study of Obesity (MASO)
Honorary Treasurer	:	Ms Christine Ong May Ee Malaysian Invention and Design Society (MINDS)

Executive Committee Members

Mr. Mahenderan Appukutty	:	Nutrition Society of Malaysia (NSM)
Professor Dr. Lee Chai Peng	:	Geological Society of Malaysia (GSM)
Dr. Loo Koi Sang	:	Malaysian Zoological Society (MZS)
Prof. Dr. Noraieni Hj. Mokhtar	:	Malaysian Society of Marine Sciences (MSMS)
Dr. Mohd Hanafi Ali	:	Malaysian Society of Radiographers (MSR)
Professor Dato' Dr. B.S. Gendeh	:	Malaysian Medical Association (MMA)

Website: www.costam.org.my

By **Gina Gallyot**
Editorial Committee

HAVE YOU HEARD OF THE GALLUP PATH?

“Follow This Path” offers a fascinating insight into the role of the human soul on touching others and the importance to our world economy and way of life.

Deepak Chopra Author, The Seven Spiritual Laws of Success

What do the world’s greatest organizations have in common?

They know that their most valuable resources are their employees and customers. And the best companies understand this more than anything: **People are emotional first and rational second.** Because of that, employees and customers must be emotionally engaged in order for the organization to reach its full potential.

Gallup Organization research not only bears that out, but has uncovered the secrets of creating and managing an “emotional economy” that will provide boom possibilities for your company. Follow This Path shows you how the traditional ways to engage people no longer apply in today’s world. Instead, it offers a system called **The Gallup Path**, based on proven, revolutionary strategies used by the most successful businesses. You’ll learn the prerequisites of an effective workplace, forge unbreakable bonds between employees and customers with the book’s “34 Routes to Superior Performance,” know the three crucial links that drive productivity and growth, discover the best employee and customer motivators, and much more.

Ignore the emotional economy, and you’ll miss out on financial performance. Follow This Path helps your company build relationships one customer and one employee at a time and it offers a unique new path for your organization to follow. All you have to do is value and develop the human relationships all around you and you’ll transform your business — starting today.

Here’s what the world’s most successful organizations don’t do.

They don’t suppose that either superior college grades or comprehensive training is the only accurate or dependable indicator of the right person for the right job.

Neither do they expect that employee incentives will guarantee consistently better job performance.

Instead they depend on the reliable source that other businesses disdain: **human nature.**

They know that the emotions of both employees and customers create feelings, which drive their behavior.

Great organizations are aware of the power of emotions and therefore set up the conditions that generate and cultivate emotional mechanisms among employees and customers. The only way to achieve this is through human interaction, the fastest and most powerful trigger of emotional states.

By recognizing and unleashing the innate abilities of employees and matching their gifts to the positions that will best take advantage of them, thus making them even stronger, great organizations look inward in order to move forward. They cherish the fluctuations in human behavior because they understand that these create a pathway as electric as any inside a brain.

In the end great organizations know that a reason-driven economy can travel only so far. The missing link is the engagement of deep-seated emotions as the driver of growth and profits. These — and only these — feelings are the fuel that propel talented individuals to do more, and inspire customers to return. And while reason influences both employees and customers, emotions are indispensable because they drive the best in both of them.

An Emotion-Driven Economy

Great organizations know how to chart a course through the worldwide competitive maze to keep their customer relationships not only intact but also thriving. **They do this by connecting to their customers on an emotional level.**

When that happens, customers return because of the way they feel. The response has been so phenomenal that these organizations don't refer to their return patrons as loyal. They speak of them as being **emotionally engaged customers.**

Simultaneously, great organizations create an environment in which their best performers can do what they excel at, over and over again. These men and women are so tuned in to what they are doing, and so effective at responding to the needs of customers, that profits and growth flourish, as do the employees. These men and women are referred to, with gratitude, as being **emotionally engaged employees.**

When emotionally engaged employees utilize their natural talents, they provide an instant, and constant, competitive edge. They build a new value: **emotionally driven connections between employees and customers.**

Great organizations do not treat employees and customers as if they are a mini computer who's every action, based on very complex mental processes, can be calculated in advance. Nor do they view customers as "economic agents" who are supposed to always make decisions based on price and quantity.

On the contrary, great organizations have turned from the "hard" view of people responding like machines to the "soft" side of human nature, the part that is guided by emotions. Engaging both employees and customers emotionally is the approach that steers organizations, through their managers, toward greatness. Great organizations take advantage of the fact that the economy of emotional engagement is much bigger than the economy of reason.

The single biggest concern for CEOs globally today is retaining their existing customer base, according to a recent Conference Board survey. This isn't surprising in a world in which the chief executive of one of the largest corporations operating in the United States said that his goal is to cut customer churn in half.

It looks like companies are rediscovering a basic tenet: no customers, no business. But before executives develop a strategy to retain customers, they must first ask this fundamental question: Why do businesses lose customers in the first place?

At The Gallup Organization, considerable research has gone into this question, having interviewed many millions of customers over the past 60 years. The findings have been fascinating.

One big one: Customers may initially switch to another company because of promises it makes relating to the traditional "Four Ps" of marketing — a better *product*, a lower *price*, an attractive *promotion*, or a more convenient location (*placement*).

But switching isn't the same as *staying*.

Customers create new and *enduring* allegiances because, as differentiation on these four Ps becomes negligible, the role of a fifth "P" — *people* — becomes increasingly important. Every day, a company's people — its employees — either build customer engagement or drive away customers in droves.

So just where have businesses gone wrong on the people front? The problem sure hasn't been a lack of effort — companies have invested huge sums of money in attracting and effectively managing their employees. They recruit from the best business schools, invest in training, periodically hike already attractive compensation, and build appealing stock-option plans. Why, then, do so many organizations continue to experience high customer churn?

.....

The flaw in companies' efforts — and the redemption, ultimately — lies in the human brain, more specifically, in a tiny part of the brain called the amygdala. The amygdala is the emotional center of our brains and is the key to how human beings process information and control behavior.

Ironically, in a world where size matters, the little amygdala can determine the fate of companies because it influences employees' emotional responses and behaviors.

And executives everywhere should take note of what the world's greatest companies already know: We are competing in an emotion-driven economy.

Emotion versus reason

To understand the power and nuances of the emotional economy, it's important to focus first on its seductive flip side, the "economy of reason." This economy is easy to explain because its principles are omnipresent. The economy of reason operates on a simple premise: All customers and employees are mercenaries, driven solely by pecuniary gain. It follows that the best — or possibly the only — way to motivate employees is through financial incentives. Likewise, companies try to buy customer loyalty by offering customers better products at lower prices, and then lock them in with elaborate customer loyalty programs. And what is the result of this approach? Customer and employee churn are rampant.

So what have great companies learned from the limitations of the economy of reason? It seems fairly simple, really. They have realized that human beings, whether they are customers or employees, are naturally predisposed to be emotionally engaged — **and crass commercialism is not the key to emotional engagement.**

Great companies have also realized that emotional engagement is the key to developing productive employees and the most profitable

relationships with customers. Great organizations set up conditions that cultivate emotional bonds with employees and customers.

And they know that even in the information age, the best way to achieve customer engagement is not through technology, but through people — because human interaction is the fastest and most powerful trigger of emotional states.

The irony is that while about 70% of customers' buying decisions are based on positive human interaction with sales staff, companies dedicate a miniscule 10% of their resources to ensuring that positive human interactions will take place.

Clearly, corporate priorities have been misplaced.

The proof

If the role of emotions in driving business outcomes seems to be just an interesting but untested hypothesis, here's proof to the contrary. The concept of an emotion-driven economy is rooted in data gathered from more than 10 million customers, 3 million employees, and 200,000 managers from Gallup studies across the world and across industries and job types.

In these studies, one key number emerges. Companies — including some of the biggest and best known in the world — are, at best, operating at one-third of their human potential. And the problem is within, not outside, organizations.

Are CEOs even aware of this wasted potential? Are they bothered about it? Or do they accept it as one of the hazards of doing business?

Great companies *do* care about this problem, and many are starting to address it. As Gallup's management book *Follow This Path* points out, Gallup research shows there are six things these companies have come to realize and that form the basis for the actions they take:

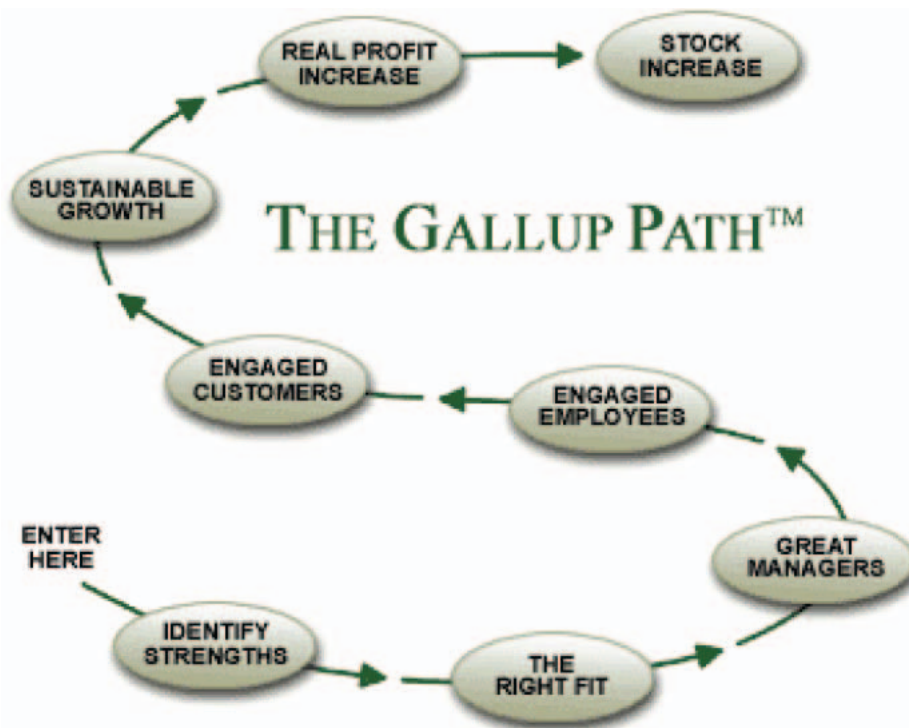
- Employees who use their natural talents in their jobs produce significantly more than average workers.
- Emotionally committed employees form teams that deliver exceptional outcomes.
- Customers recognize the passion and commitment employees feel toward them and cannot help but respond in an emotional way.
- This emotionally driven reaction builds a bridge between employees and customers that creates engagement.
- This engagement becomes the key factor that drives sustainable growth.
- Sustainable growth is the route to profits and, ultimately, higher stock value.

Every company that wants to follow this path must focus on three areas that are crucial to sustainable growth:

- selecting and developing employees
- how managers create employee engagement
- how engaged employees develop engaged customers

In part two of this series, we'll consider how companies can start their journey toward sustainable growth. The first step is to answer these key questions: Are your employees cast in roles according to their talents? Are they working with great managers and on great teams? And are they creating customer engagement?

Following these six steps — an emotional-economy pathway that we call The Gallup Path — is essential if a company wants to survive and flourish in the years to come.



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“It’s not the strongest nor most intelligent of the species that survive; it is the one most adaptable to change” – Charles Darwin



PACS IN DIAGNOSTIC IMAGING

By **Mr. Lim Chun Jek**
e mail: jekjxp139@hotmail.com
U29 Diagnostic Radiographer
Department of Biomedical Imaging
University of Malaya Medical Centre, Kuala Lumpur

Introduction

Planning in diagnostic radiology is no different than planning in any other business. Business planning requires envisioning the future and its ramifications. Alternative scenarios for the future must be identified, evaluated, and prepared for. Present decisions can have a substantial influence on future choices.

Now all the imaging modalities employed in digital image processing and display attempts to digitize conventional radiographic procedures that already have significant clinical application. In responding to such challenges, it is necessary to design a database for this kind of images in such a way that the medical information can be retrieved independent from the technical method being used for image acquisition. The information must be also achieved for any imaging orientations, for different body regions, considering the analyzed biological system (Lehmann, et al., 2003).

The resulting Picture Archiving and Communication System (PACS) needed in the future will allow global access of the shared resources (Wein, et al., 2003).

Picture Archiving and Communication System (PACS)

PACS is an inter- and intra-institutional computational system that manages the acquisition, transmission, storage, distribution, display and interpretation of medical images. As such, the system is highly integrated with the imaging operation of the radiology department and with image-based clinical practice (Samei, et al., 2004).

The idea of the PACS was to convey images from all modalities to a digital archive with large capacity and to allow transmission of the single studies of images from the archive to mono or multi-monitor referring workstations through a

local area network (LAN). With the development of integrated health care systems supported by the appropriate information infrastructures, PACS can be implemented over distant networks to provide remote access to patient information and to support one of the most promising forms of telemedicine and teleradiology.

When PACS is fully utilized, radiologists and radiological technologists can schedule and order exams, update patient information across an enterprise, provide information and images to physicians at the point of care, and provide diagnostic tools, features and functionality to ensure the highest diagnostic quality of interpretation. It provides users with instant access to as much imaging data as they require based on their interaction with the image.

Although PACS can now be considered a mature technology, not all of the key issues have been resolved. PACS are often complex and costly to acquire, replace, maintain, or repair. Furthermore, the performance of a PACS can directly affect patient care and clinical flow. Thus, careful attention should be paid to the selection of a system that meets the needs and requirements of the user.

Many technical problems prevent exclusive use of a PACS in current heterogeneous, multi-vendor environment. These problems cover every aspect of PACS and include the cost of equipment. As the costs of computers, memory, disk space, speed and performance increases, PACS will become more feasible over the next decade.

Conclusion

PACS have the potential to fundamentally change clinical and production processes and may support the more efficient use of resources. Therefore, installation of the PACS system in future is very useful and needed in a radiology department.



UNLEASHING THE POWER OF MANAGING IN HEALTHCARE SERVICES

By **Ms Ravi Chanthriga Eтурajulu**

e mail: chandassan@yahoo.com

U42 Senior Diagnostic Radiographer, Department of Biomedical Imaging, University of Malaya Medical Centre, KL

What is the definition of management? 'Management is the function of getting things done through and with people and directing the efforts of individuals toward a common objective'. Hence, it is the manager's role and function to achieve goals of an organisation with the help and co-operation of his subordinates and fellow employees.

As a manager in health care services, by acknowledging the inherent antagonism between strategic planning, the structure and the function of hospitals coupled with the explicit integration and adaptation of existing models, a strategic formulation process can be developed into an operational tool with the co-operation of subordinates to achieve the organisation's goal together. However, this is not possible to be achieved by mere delegation but with the creation of a better working atmosphere within which, subordinates can find as much satisfaction of their needs as possible.

The multiplicity of functions that sums up the whole of personnel management is considered as employment policy, working conditions and human relationships. Therefore, management is better defined as 'getting things done through and with people by enabling them to find as much satisfaction of their needs as utterly possible while at the same time motivating them to achieve both their own objectives and the objectives of the institution'.

A good manager is made by practice, learning and with experience and leadership characteristics, he or she is developed into a mature person with management skills. Therefore, managerial skills are an important tool to a supervisor, the fact that it can be learned and the benefits of acquiring them from experiences makes it a useful platform to be considered as an efficient manager.

In view of management responsibilities, there are three different aspects to be done in a hospital. This involves three patterns, which are looking inwards, where responsibilities arise from within the hospital itself, looking outwards, where contacts are made with the outside world and finally looking forward, where the organisation needs to change and not be static.

Looking inwards deals with internal management affair, where action starts and finishes within the individual hospital or group which involves little interaction with other bodies whereas looking outwards will be serving patients and their relatives or potential consumers and customers, giving preference to the patients' needs by preserving a record of satisfactory service. Current and ex-patients are always the best (or worst) advertisement for a hospital. In addition to this, management of public relations is vital and cannot be neglected because the total image of the hospital depends on general impression of the excellent services provided. As the business world has learnt, an organisation's name and fame does not just happen

to stay good; it has to be worked for, cultivated and carefully guarded.

With regards to looking forward, managers need to gear themselves and learn to face the reality of changes and see what they can do to contribute to the organisation on not being static or for survival in a continuous adaptation of changing environment and technologies. Therefore, selecting the right people to do certain tasks, building up team, appraising, managing adversity, motivating and developing people and finally managing change through people is of utmost importance. Proper guidance should be given in order to get more efficient and competent staff rather than leaving them to derive their own devices.

Management, as it is generally taught and written about, is not an academic discipline but it is a practical art or science, calling for certain attitudes and skills, which are usually regarded as to be developed by training and experience rather than teaching. Unfortunately, what has been almost wholly lacking hitherto is proper training in supervision and management duties. Throughout, the service, staffs move up the ladder into supervisory and managerial posts without any sort of preparation for their new role. These promotions are largely on the basis of superior professional skills.

Although management powers may be awakened in training, one can only develop the skills by the careful handling of people oneself. In today's health care market, changing roles demand the use of varied and comprehensive management practices, which is a process that needs to be proactive, not reactive and should be a joint effort, not solitary. However, if properly practiced, the impact upon work relationships and professional development is immeasurable. An organisation and its employees are interdependent and only a mutual beneficial relationship with good leadership enhances the ability of both to create values and reach to the objectives.

In conclusion, as what Sir Noel Hall (cited in Spencer, 1967) has said 'the central power in management is the faculty of judgement, the capacity to apply knowledge and the fruits of experience. It is the possession of superior judgement, developed only by the carrying of responsibility that should distinguish the man at the top'.

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Congratulations to Ms Ravi Chanthriga Eтурajulu on her recent promotion from Grade U36 to Grade U42 on 1st July 2007 by the management of University Malaya of Medical Centre, Kuala Lumpur. We wish her all the very best in her future endeavour!



Combined Asian Breast Diseases Association BreastScreen Singapore



Breast Cancer Conference
16 – 18 Nov 2007, Orchard Hotel, Singapore

Conference Secretariat

c/o: Wizlink Consulting Pte Ltd
2, Jurong East Street 21, #04-15, IMM Building
Singapore 609601

Tel : (+65) 6569-3669
Fax : (+65) 6569-6998
Enquiry : abda-bss@wizlink.com.sg
Website : <http://abda-bss.wizlink.com.sg>

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Institution : _____

Mailing Address : _____

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Tel : (_____) _____ Fax: (_____) _____

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REGISTRATION FEES (Please tick ✓ accordingly)

Main Conference Registration	Early Bird (Before 1 st Sept 2007)	Normal Rate (From 1 st Sept 2007)	On Site (After 1 st Nov 2007)
Doctors	<input type="checkbox"/> SGD\$300	<input type="checkbox"/> SGD\$400	<input type="checkbox"/> SGD\$500 / Day
Doctors in-training*	<input type="checkbox"/> SGD\$150	<input type="checkbox"/> SGD\$200	<input type="checkbox"/> SGD\$300 / Day
Others⁺	<input type="checkbox"/> SGD\$150	<input type="checkbox"/> SGD\$200	<input type="checkbox"/> SGD\$300 / Day
Pre-Conference Workshop [‡]	Attending Workshop ONLY		Attending Workshop & Conference
Doctors	<input type="checkbox"/> SGD\$150	<input type="checkbox"/> SGD\$100	
Doctors in-training*	<input type="checkbox"/> SGD\$80	<input type="checkbox"/> SGD\$50	
Others⁺	<input type="checkbox"/> SGD\$80	<input type="checkbox"/> SGD\$50	
Digital Mammography Training & Self-Assessment Workshop [‡]	Date	Time	
(Kindly select your preferred date and time with a tick ✓)	<input type="checkbox"/> 16 Nov 2007	<input type="checkbox"/> 1030 – 1145 hours	
	<input type="checkbox"/> 17 Nov 2007	<input type="checkbox"/> 1200 – 1300 hours	
	<input type="checkbox"/> 18 Nov 2007	<input type="checkbox"/> 1400 – 1500 hours	
		<input type="checkbox"/> 1515 – 1615 hours	
Conference Dinner on 17th November 2007[‡]	<input type="checkbox"/> Yes, I wish to attend		

* Doctors in-training and Students are to produce proof from their institution.

+ Allied Health Professionals (Technologist, Research Specialist, Nurse, Paramedic), Public Health Executives.

‡ Limited seats available on a first-come-first-served basis.

MODE OF PAYMENT (Please tick ✓ one)

CHEQUE / BANK DRAFT

Cheque / bank draft should be crossed, in Singapore Dollars and made payable to "Wizlink Consulting Pte Ltd – ABDA-BSS 2007". Kindly write "ABDA-BSS 2007" and delegate's name on the reverse side of the cheque/ bank draft and mail it to our conference secretariat.

TELEGRAPHIC TRANSFER

(Delegate to bear all charges incurred in the transfer, including banks and agencies charges)

Bank Details will be provided upon registration.

CANCELLATION POLICY

1. Request for cancellation/replacement must be made in writing to the Conference Secretariat, latest by **15th October 2007**. The organising committee regrets that requests received after this date will not be entertained.
2. Please take note that refunds (less 2% for administrative charges) will be issued after the event. There will be no refund for cancellation made after **15th October 2007**.

REGISTRATION DEADLINE

Registration closes on **1st November 2007**. Submissions received after this date will be considered as on-site registration.



**Combined ABDA-BSS
Breast Cancer Conference**
16 – 18 November 2007, Orchard Hotel, Singapore

Conference Secretariat
c/o: Wizlink Consulting Pte Ltd
2, Jurong East Street 21, #04-15, IMM Building
Singapore 609601

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	Per Night	Location
Orchard Hotel (5-Star) 442 Orchard Road Singapore 238879	<input type="checkbox"/> Superior Room – Single (S\$195++) <input type="checkbox"/> Superior Room – Double (S\$215++) <input type="checkbox"/> Superior Plus Room – Single (S\$215++) <input type="checkbox"/> Superior Plus Room – Double (S\$235++)	Conference Hotel
Rendezvous Hotel Singapore (4-Star) 9 Bras Basah Road, Singapore 189559	<input type="checkbox"/> Deluxe Room (S\$195++) <input type="checkbox"/> Superior Room (S\$210++)	20 minutes drive to conference venue
YWCA Fort Canning Lodge (3-Star) 6 Fort Canning Road, Singapore 179494	<input type="checkbox"/> Standard Single Room (S\$95++) <input type="checkbox"/> Standard Double Room (S\$105++)	20 minutes drive to conference venue

Rates quoted include breakfast daily

DELEGATE'S INFORMATION (Please type or print clearly and use a separate reservation form for each delegate)

Salutation* : Prof A/Prof Dr Mr Mrs Mdm Ms

Last/Family Name* : _____

First/Given Name* : _____

Country* : _____

Tel* : () _____ Fax: () _____

Email* : _____

ROOM REQUIREMENT

Room Type* : Single Twin No. of Nights* : _____

Name of Accompanying Guest (if any): _____

CHECK-IN/CHECK-OUT & FLIGHT DETAILS

Check-in Date* : _____ Arrival Flight No : _____ ETA: _____

Check-out Date* : _____ Departure Flight No : _____ ETD: _____

CREDIT CARD DETAILS*

Amex Diners Mastercard Visa Cardholder's Name : _____
(Name as stated on credit card)

Credit Card No: _____ Expiry Date: _____

Cardholder's signature/Date: _____

* Indicates mandatory fields

NOTES ON ROOM RESERVATION

- ◆ Rates quoted are in Singapore Dollars subjected to 10% Service Charge and thereafter 7% Goods & Services Tax.
- ◆ All rates quoted are subjected to change without prior notice.
- ◆ Advance reservation is required before **16th October 2007**. Thereafter, rooms are subjected to availability at Hotel's best rate.
- ◆ All reservations must be guaranteed by credit card for the full duration of stay.
- ◆ Where cancellation is made less than 7 days to arrival, or when there is No-Show, 100% of the room charges will be levied as cancellation charges.
- ◆ Where cancellation is made more than 7 days in advance, 50% of the total room charges will be levied as cancellation charges.
- ◆ The rates quoted are specially meant for this group only. It cannot be used as future reference.