

Beyond

PAPRSB Institute of Health Sciences Newsletter

January—March 2016

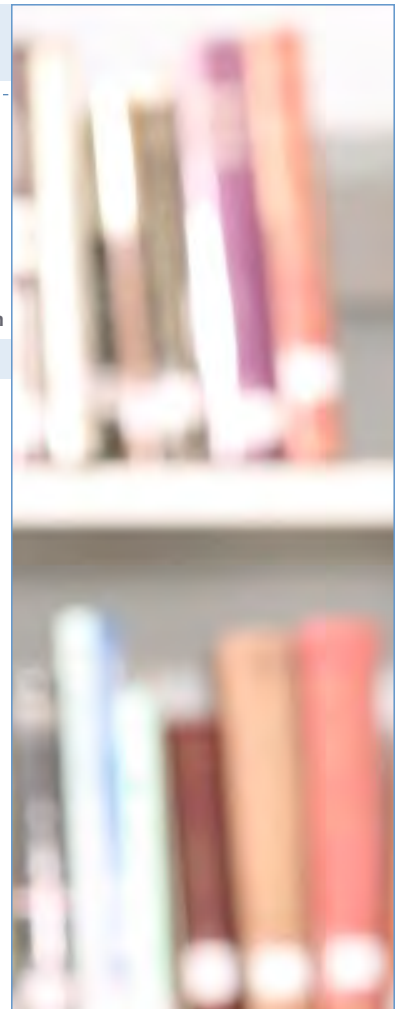


Universiti Brunei Darussalam

Issue 6



Universiti Brunei Darussalam participates in Brunei Darussalam's 32nd National Day Celebration Parade at Bandar Seri Begawan on 23rd February 2016



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PAPRSB Institute of Health Sciences attends the first Brunei Higher Education Expo



On February 13-15 2016, the Scholarship Section and Higher Education Section of the Ministry of Education organised a Higher Education Expo 2016 at BRIDEX Hall in Jerudong. It was the first expo to bring together most of the country's higher education institutions, and is aimed to showcase and share information on the various paths and opportunities available for students at all levels of higher education in

Brunei. Universiti Brunei Darussalam joined other private and government higher education institutions during the three-day expo, where the programmes offered are showcased to potential students, in order for them to gather the information they need to further their education.

BHSc (Pharmacy) in Brunei Darussalam

Brunei Darussalam Pharmacy Board (BDPB), under the Ministry of Health (MoH), banned few cosmetics, in February (Ref. The Brunei Times, 21 Feb 2016) namely Lovely-Perfect Whitening & Beauty Cream, Ling Zhi-Bleaching Whitening Cream with Pearl Powder and DNARS skincare, which contain mercury, hydroquinone and tretinoin, due to their harmful effects on human health. This was tested in Drug Quality control Section and the ban will be enforced by the Pharmacy Enforcement Section. The pharmaceutical production section of MoH produces 5500 kg of various external solid preparations like creams and ointments of different therapeutic drugs. Dispensing services under Pharmaceutical care division dispensed 1,762,338 items in 2013 alone (Ref. Department of Pharmaceutical Services, Annual Report 2013).

Pharmacy moves forward as a profession with increasing and expanding roles in the health care sector. There are various other divisions under Department of Pharmaceutical Services like Drug Purchasing section, stock management, regulatory section, clinical services, amongst others. Pharmacists in RIPAS hospital and other clinical centres cater to Brunei Darussalam with a unique healthcare sector where the public health is covered by the government.

Pharmacists are an integral part of health care system, thus they need to have competence in communication, interpersonal, leadership, analytical and counselling skills as well as scientific acumen in order to be successful. PAPRSB Institute of Health Sciences, Universiti Brunei Darussalam will offer the BHSc (Pharmacy) Programme starting in August 2016. The curriculum is an outcome based and a spiral curriculum where it will introduce the knowledge, attitude and skills gradually and incrementally to reinforce them into future professional pharmacy graduates.

Pharmacy Research Workshop — 15 & 17 January 2016



Academics at PAP Rashidah Sa'adatul Bolkiah Institute of Health Sciences, UBD conducted a research training course on 'clinical research methods-a practical workshop' for the pharmacists working at the Department of Pharmaceutical Services, Ministry of Health. This workshop was tailor-made to suit the clinical pharmacists with an aim to introduce various clinical research methods, enhance and enable them to engage with research activities in their day to day clinical practice, hence to improve pharmacy services. This two days hands-on research training held on 15th and 17th January 2016. The workshop facilitators included Professor Kumar Venkatasalu, Professor in Cancer and Palliative care; Dr Sheba David, Senior Lecturer in Pharmacy; Dr Rajan Rajabalaya, Lecturer in Pharmacy; Hjh Salmah binti Mohd Noor, Lecturer in Nursing; and Dr Alice Yong, Chair, Ministry of Health Research and Ethics Committee (MHREC). We envisaged that this training programme would enable IHS, UBD to engage in meaningful research and training collaborations with local clinical services, which in turn will enhance contribution to wellbeing of local society.

In total, 23 pharmacists attended this workshop. Associate Professor Dr Anne Cunningham gave an opening speech on the importance of evidence based practice. At the end of the workshop, participants were asked to provide feedback on the workshop using an Evaluation form adopted from WHO, 2012. Overall assessment of the event was rated good (70 %) and excellent (21%). 83% of the participants said that

the knowledge and information gained from their participation is mostly useful and applicable in their work place. Participants reported sessions such as ethics, how to develop research proposals, sharing ideas with peers on areas needing improvement, survey instruments, clinical audits, collecting and conducting data analysis, group presentation, skype session with Palliative Care consultant from one of the UK hospice and the practical hands on sessions were interesting.

As part of this hands-on practical workshop, participants were asked to bring their own project ideas. In total 13 participants brought their research ideas. The facilitators scrutinized all proposals and selected 5 topics which were viable, feasible and ready to get started, if given support. Participants were supported to develop these ideas to concept note and then to methodology for those projects. On the second day, participants presented their projects and top 2 best presentations were selected for awards which were presented by Dr Hjh Maslina Binti Hj Mohsin, Dean, PAP Rashidah Sa'adatul Bolkiah Institute of Health Sciences, UBD. The team also hosted a joint follow-up meeting with Ms Wong Wai See from the Department of Pharmaceutical Services, Ministry of Health, Brunei Darussalam and discussed further on conducting those selected projects.

“Getting Research Published” seminar by Eminent Visiting Professor Tar-Ching Aw

Biography Professor Tar-Ching Aw



**MBBS, PhD, FRCP, FFOM,
FFPHM**

- Is currently an Eminent Visiting Professor at the Institute of Health Sciences, Universiti Brunei Darussalam. He is also Adjunct Professor at the Herbert Wertheim College of Medicine, Florida International University.
- Professor Aw spent eight years at the United Arab Emirates University where he was Director of the Institute of Public Health. He also served as interim Dean of their College of Medicine for 2 years, and in 2013, he was designated as Director of the only WHO Collaborating Centre for occupational health in the Middle East.
- He worked previously at the University of Kent in Canterbury where he was Professor of Occupational Medicine, as senior lecturer at the Institute of Occupational Health in Birmingham, and at the US CDC as an Epidemic Intelligence Service (EIS) Officer.

Getting research findings published in peer-reviewed journals is becoming increasingly important for academic staff, research officers, and students who conduct research on a regular basis. Without publications, research efforts lack recognition. Prospects for promotion, gaining appointments at universities and research institutions, obtaining national and international status and standing all depend in part on a steady output of papers. The process leading to successful publication starts with a well-designed research project. The project should be relatively novel in regards to concept, design, conduct, relevance, and possible findings. A literature search can indicate whether the research idea has already been investigated adequately. To succeed, the research proposal should be adequately funded. It must also be sound and unlikely to cause undue discomfort or harm to participants, the researchers themselves, and third parties. Hence, ethical clearance is an essential step for most research projects.

Editors of journals are often keen to consider submitted papers that demonstrate a novel technique, a new finding (e.g. a cure or a successful intervention), an alternative but plausible idea, something that impacts on practice, or a contribution to better knowledge and understanding. Even where research efforts show no demonstrable benefit, e.g. from a possible new treatment, publication of this ‘negative’ finding can contribute to a better understanding of the subject being researched. It also reduces publication bias.

While not often considered as original research, the review of published papers on a common theme can reveal the current status and trends for topical issues. Evidence-based reviews are favored, especially by busy practitioners, who might want a summary on what is presently known about a specific topic. The conduct of a meta-analysis on a set of epidemiological studies that have a common design can increase the contribution of many studies on the same theme to one main conclusion on the findings.

A personal opinion or a case report of an interesting clinical finding, or health effects from a unique or rare exposure, might be of sufficient interest to warrant publication. Individual cases do not constitute definitive proof, but these reports can help construct hypotheses that can then be subject to further investigation. Clinicians who have access to patients are well placed to identify and report interesting cases. Where several such cases are identified by different observers, the publication of these cases can lead to a new syndrome or disease.

There are therefore many avenues for obtaining research ideas, conducting well-designed research projects, and then submitting a paper for publication. Junior researchers in particular should be encouraged to contribute to research, and to participate in the writing of papers on the research findings for consideration. Their efforts should be acknowledged by their senior colleagues, and where warranted they should be included as co-authors in the publication. This can be a welcome boost to their efforts, and can only be a positive step in encouraging research.

PAPRSB IHS welcomes new Dean

Dr Rafidah binti Hj Gharif, current Medical Superintendent of Community Health at the Ministry of Health, Brunei Darussalam, has been instated as the Dean of the Pengiran Anak Puteri Rashidah Sa’adatul Bolkliah Institute of Health Sciences from February 2016. Dr Rafidah replaces Dr Hjh Maslina binti Hj Mohsin, who has been Dean of the PAPRSB IHS since 2011. Dr Hjh Maslina has been appointed as the Deputy Permanent Secretary (Professional and Technical) at the Ministry of Health.

PAPRSB IHS welcomes Dr Rafidah, and wishes Dr Hjh Maslina the very best in her future endeavours.

Research Focus: Genetic Predisposition and Profiling in Breast Cancer

Breast and ovarian cancers affect women worldwide. The lifetime risk of developing breast and /or ovarian cancer increases from 5% in a non-carrier to up to 50 - 80% and/or 20-40% respectively in a carrier of mutation in BRCA1 and BRCA2 genes. My research group is focused on mutation analysis of genes

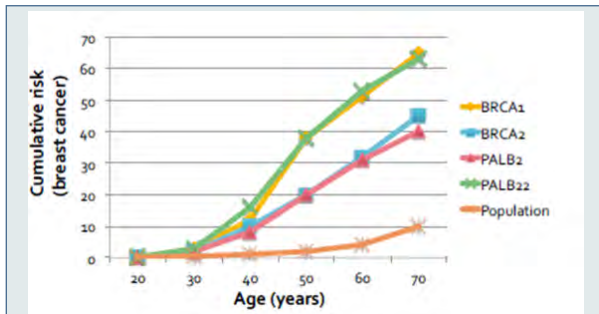


Figure 1: Cumulative risk for each gene increases to 10-fold in individuals who have two or more first-degree relatives with breast cancer at 50 years old

predisposing to breast cancer i. e BRCA1, BRCA2, PALB2 and TP53 in Brunei breast cancer patients. We are also interested in the phenotypes and genetic characteristics of breast cancer in the Brunei population. The latter is interesting to study as clinically it is shown that breast cancer in Brunei occurs at a young age. We also study Spleen Tyrosine Kinase (SYK) gene whose role as either a tumour

promoter or suppressor is still the subject of interesting and promising research. We look into the expression of SYK across phenotypical changes of breast cancer tissues and whether SYK is involved in programmed cell death of breast cancer. Our techniques include the use of PCR and DNA sequencing. We use laser capture microscopy for precise isolation of single cancer cell that will provide DNA and RNA of quality that allows quantifiable mutation analysis of the genes of interest. One of our objectives is

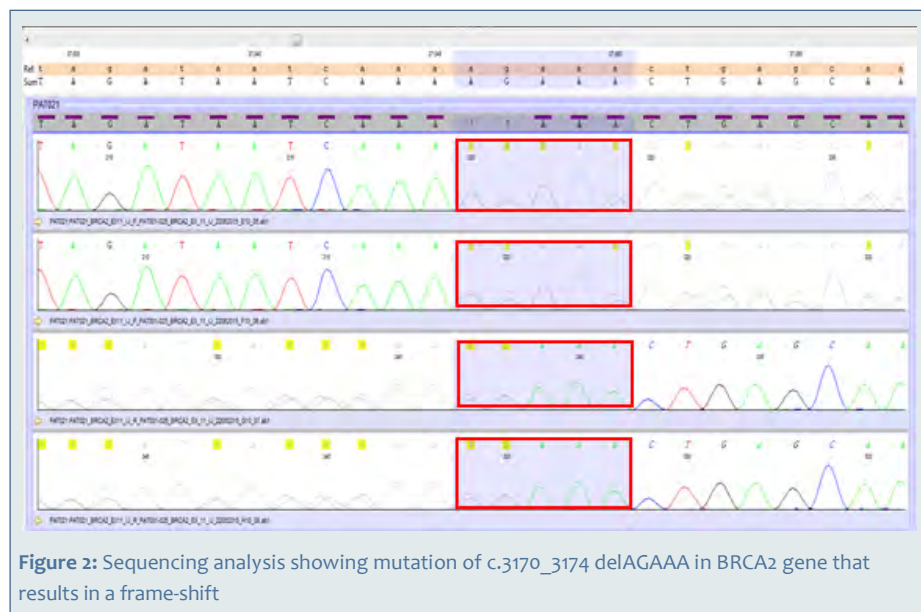


Figure 2: Sequencing analysis showing mutation of c.3170_3174 delAGAAA in BRCA2 gene that results in a frame-shift

the development of Breast Cancer Genome Atlas for Brunei. This study, the development of protocol for the four gene mutation analysis and analyzing SYK as a potential cancer biomarker can serve as a translational approach in research where the protocols and the results are relevant and useful to clinical practice and management of respective patients.

Staff Profile Dr Hjh Mas Rina Wati Haji Abdul Hamid



Professional Experience

- Senior Lecturer: PAPARSB Institute of Health Sciences, Universiti Brunei Darussalam, 2004– Present
- Scientific Officer: Department of Scientific Services, Ministry of Health, Brunei Darussalam, 1998 - 2004
- Postdoctoral Research Fellow: Institute of Molecular and Cell Biology, National University of Singapore, 1993 - 1998

Education

PhD:
Department of Biological Sciences, Heriot-Watt University, Edinburgh, United Kingdom, 1988- 1993

BSc (Hons) Microbiology: Department of Biological Sciences, Heriot-Watt University, Edinburgh, United Kingdom, 1983 - 1987

Teaching Interest

- Molecular and cell biology, Molecular genetics
- Medical genetics

Research Interest

- Genetics and molecular biology of breast cancer and other cancers prevalent in Brunei Darussalam
- Role of BRCA, SYK and related proteins in apoptosis
- Cancer profiling and Genetic Databases
- Characterization of Thalassemias
- Development of DNA technologies in detection of genetic diseases in Brunei Darussalam
- Development of DNA technologies in detection of medically-pathogenic organisms in Brunei Darussalam
- Approaches in cancer management including genetic counseling

PAPRSB Institute of Health Sciences Student Council Organises IHS Carnival 2016



For a total of three days, Institute of Health Sciences Student Council successfully organised a carnival with the main aim of raising funds for IHS as well as for a charitable organization, the Brunei Darussalam Down Syndrome Association (ABLE). The other objectives were to strengthen the relationship between IHS student and staff by creating a goal to produce a successful event and also, to invite the public including families and school children to enjoy their short school vacation.

PAPRSB IHS carnival 2016 was held from 26-28 February 2016. The carnival was open to public and have received a large number of visitors comprising of UBD staff and students, as well as from the public.

Throughout the carnival, there were numerous exhibitions in the concourse area which were available to the visitors. Among these were IHS Student Council booth, health screening booth, Persatuan Mahasiswa Mahasiswi Universiti Brunei Darussalam (PMUBD booth), Henna and Facepaint booth. There were also 4 game booths available; darts throwing, bouncing pingpong into the cups, mini bowling and nerf-gun shooting. In addition, a book booth was set up to clear second hand books for sale.

The most popular game was “Escape The Hospital”. Escape room is a popular game in which a team of 3- 6 people are locked in a room and have to utilize the elements and clues in the room to solve a series of puzzles to move on to the next room/ escape the room within a set time limit. It was fully booked since the first day of the carnival and it was so highly-demanded that the opening

hour was extended to 7 PM (instead of 4PM) to accommodate more participants.

In conjunction with the carnival, a cat show was organized. A health talk titled “Cervical cancer awareness” was also delivered



by Hjh Norhalizawaty, who was a nursing officer from the Ministry of Health. Food vendors were invited to participate in the carnival. Among the food vendors were Flap Jack, Bliss Nestle yoghurt drink, Jollibee, KFC and Rack and Brew.

On the last day of the carnival, numerous activities were carried out namely self-defense training, ZUMBA, taichi and musical performance. Blood donation drive was held in conjunction with Jerudong Park Medical Center (JPMC) to replenish the JPMC blood bank there.

PAPRSB HIS applauded the Students’ Council active contributions towards charity.

Electro-Cardiogram Workshop held at the PAPRSB IHS



The simulation team of PAPRSB Institute of Health Sciences, UBD organised a one day Electro-Cardiogram (ECG) workshop with the support from Mc Quipp Technisell Marketing Sdn.Bhd on 15th March 2016. The workshop was held at the IHS SimCentre aimed to teach the fundamental skills for basic ECG analysing and interpretation of various cardiac rhythms. The participants were given an opportunity to learn and participate actively using the high fidelity simulators during the workshop.



The workshop was facilitated by Md Khairulamin (Lecturer) from PAPRSB Institute of Health Sciences and supported by Nursing Officer Hjh Mariah Hj Abdul Ghani and Staff Nurse Noorimah Hj Salleh from the Coronary Care Unit of Raja Isteri Pengiran Anak Saleha (RIPAS) Hospital. Among the attendees were doctors, nurses, paramedic, midwives and other allied health professional from PAPRSB Institute of Health Sciences, Ministry of Health, Jerudong Park Medical Centre, Gleneagles-JPMC, Brunei Shell Petroleum and Sport Medicine.

Concurrently, the simulation team and Mc Quipp Technisell Marketing Sdn.Bhd also organised a two days Kagaku Kyoto products training. The training was facilitated by Norashikin Haji Md Sofian from PAPRSB Institute of Health Sciences and presented by Lead Dynamic (M) Sdn Bhd representatives. The participants were given the opportunity to operate and had a hand-on experience using various simulators products from Kagaku Kyoto Co. LTD. The products presented were Airway Management Simulator, Intravenous Arm II, Strap-on Venipuncture Trainer, Airway Suction Trainer, Catheterization and Enema Simulator, Tube Feeding and PEG simulator and Physical Assessment “Physiko” Simulator.

Overall, the ECG workshop and training provides participants with a refreshing knowledge on simulation products.

Delegates from University of Flinders visit the PAPRSB Institute of Health Sciences



The Faculty welcomed back an old friend, Mrs Debbie Smith (formerly from SHBIE, UBD) together with a delegation of 9 colleagues from the Faculty of Medicine, Nursing and Health Sciences, University of Flinders, Adelaide on 18th January 2016. This personal connection had led to a group of 8 Flinders students spending a 3 week attachment with Smarter Brunei in October 2015. They have now received funding from the Australian government (under their New Colombo Plan to encourage students to travel to ASEAN countries) to continue this programme, so the Faculty are keen to extend their working collaborations in Brunei.

Their faculty has 8300 students studying health related courses in Adelaide, plus campuses in South Australia and the Northern Territories. They pride themselves on their flexibility, have an emphasis on inter-professional education and delivering workforce needs. There are a number of areas of potential collaboration for both undergraduate and graduate degrees, including an interesting Cotutelle or joint doctoral programme. There are potential areas for research collaboration, particularly around obesity, with the potential to apply for ASEAN / Australian grants. The Faculty is in the process of agreeing a Memorandum of Understanding with them.

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The Pengiran Anak Puteri Rashidah Sa'adatul Bolkiah (PAPRSB) Institute of Health Sciences

Since its inauguration in September 2000, UBD's PAP Rashidah Sa'adatul Bolkiah Institute of Health Sciences has expanded beyond solely providing medical training. Graduate Programmes such as MSc in Primary Health Care, Master of Public Health, and Masters and PhD by Research as well as Undergraduate Programmes across four main disciplines – Medicine, Biomedical Sciences, Nursing and Midwifery are now offered. We ensure the Institute remains relevant and sensitive to the rapidly changing needs of the country. Our programmes are products of a continuous review of our curricula, and indeed, all our undergraduate programmes and diplomas have recently undergone major enhancements and are now also designed to encourage innovation and entrepreneurship, and for students to assume leadership roles, tempered with a keen awareness of the environment.

PAPRSB Institute of Health Sciences

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