

MERDEKA
AWARD

Fostering a Culture of Excellence

2013

MERDEKA AWARD
2013

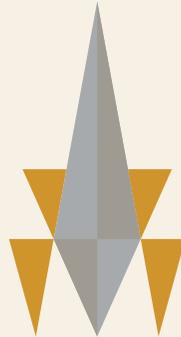
ExxonMobil



PETRONAS



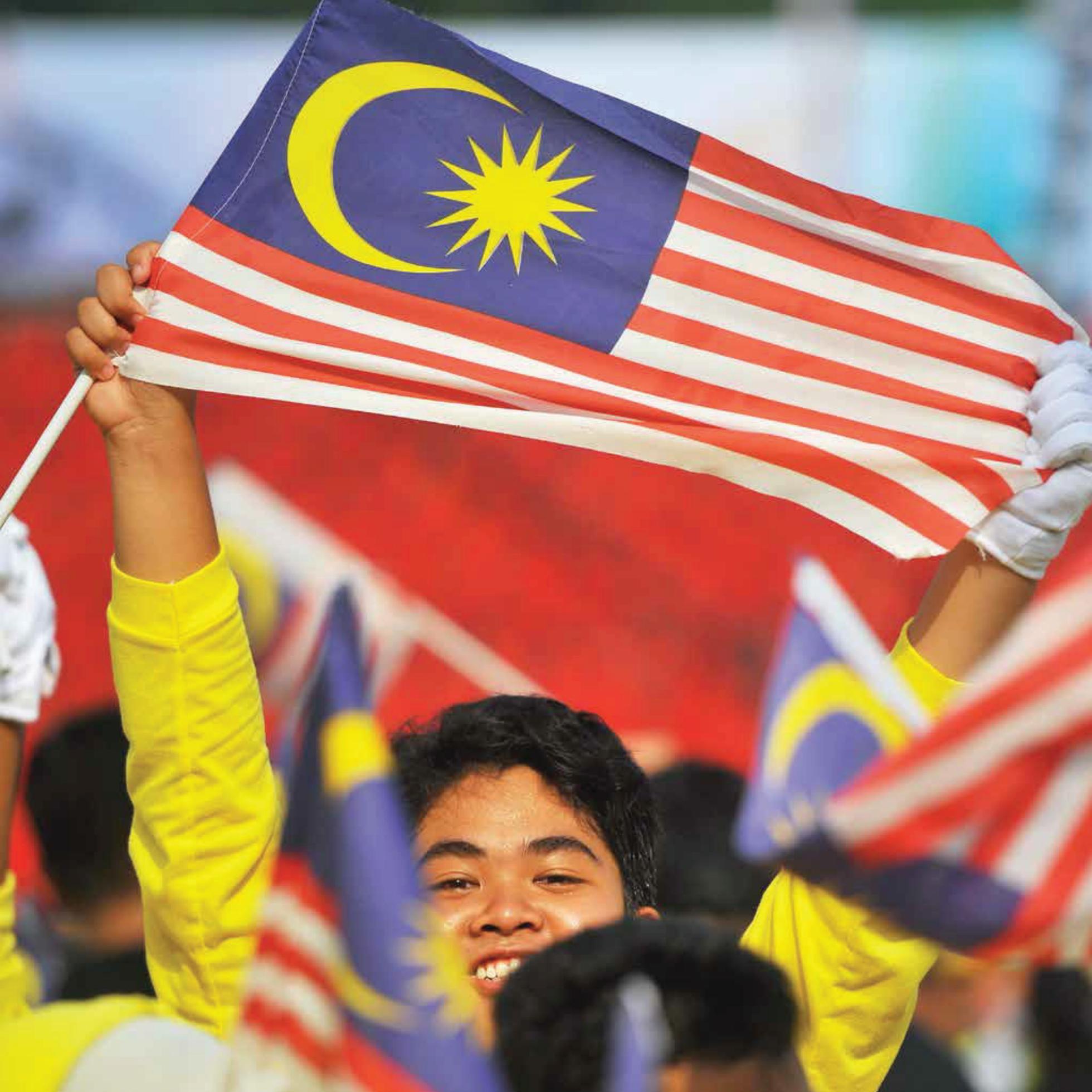
This work is the Copyright © of the Merdeka Award Trust. Any and all unauthorised reproduction, publication or transmission of this work by any means, electronic or mechanical, including photocopying, recording or by any information storage and retrieval system, whether of any part thereof or in whole, including any text or images hereincontained, is strictly prohibited. The moral right of the author has been asserted.



M E R D E K A
A W A R D

The Merdeka Award aims to promote thought leadership and innovation, foster a culture of excellence, encourage a world view, thereby enhancing Malaysia's standing as a dynamic, competitive 21st Century Global Player in all key sectors from science and technology to the arts.

www.merdekaaward.my





Merdeka Award - The Pursuit of Excellence and Contribution to Nation

The Board of Trustees of the Merdeka Award Trust named five eminent individuals as the recipients of the 2013 Merdeka Award, for their outstanding and lasting contributions in their respective fields to the nation and the people of Malaysia.

The announcement was the culmination of an extensive and exhaustive search both within Malaysia and internationally.

These individuals have gone beyond the call of duty and in the course of their work, demonstrated the true *Spirit of Merdeka* - that of the liberation of mind and spirit and the pursuit of excellence.

The five 2013 Merdeka Award recipients are:

- Education and Community Category (Joint Recipient) - **Tan Sri Dato' Seri Utama Arshad Ayub** received the Merdeka Award for his outstanding contribution in shaping Malaysia's education landscape through the development of professional education, education reforms and innovation that have resulted in education becoming more accessible to Malaysians.
- Education and Community Category (Joint Recipient) - **Raja Tan Sri Dato' Seri Utama Muhammad Alias Raja Muhammad Ali** for his outstanding contribution to rural development and rural reform through organising successful land settlement projects (FELDA) for the many landless, rural population in Malaysia.
- Environment Category - **Dr Lim Boo Liat** for his outstanding contribution to the conservation of Malaysia's biological diversity through the study, understanding and control of vector-borne diseases and the relationship between diseases and the environment; and for advocating the protection of our natural heritage.
- Health, Science and Technology Category - **Tan Sri Dato' Dr Yahya Awang** for his outstanding contribution to pioneering the development of clinical research and cardiac surgery in Malaysia and for his instrumental role in the establishment of the National Heart Institute (IJN).
- Outstanding Scholastic Achievement category - **Emeritus Professor Dato' Dr Lam Sai Kit** for his outstanding contribution to scholarly research and development in medical virology and emerging infectious diseases including dengue.

There was no award in 2013 in the category of Outstanding Contribution to the People of Malaysia.



2012 Merdeka Award Presentation Ceremony

Collectively, the Merdeka Award recipients have made a positive impact on numerous lives, not just in Malaysia, but also in the region and around the world, and made a significant difference to our understanding and appreciation of the world we live in today.

Earlier in the year, two researchers were named the inaugural recipients of the Merdeka Award Grant for International Attachment, a signature programme of the Merdeka Award that aims to reach out to the younger generation of Malaysians and inspire them to excel and contribute to the nation.

The Grant is designed to identify and recognise outstanding young Malaysians who personify the *Spirit of Merdeka*, and those who, in their own areas of expertise and in their own way, demonstrate a commitment to excellence.

By introducing the Merdeka Award Grant for International Attachment, the Merdeka Award aims to nurture these young leaders to help the nation compete effectively in the global arena.

This is done by making it possible for these young Malaysians to engage in short-term collaborative projects and programmes at selected, internationally recognised host institutions abroad.

These collaborative attachments will help them establish contact and working relationships with experts in the field, share knowledge and experience, and upon their return, use these relationships and scholarship to further build on the body of work in their areas of research.

The recipients for 2012-2013 are Assistant Professor Dr Abhimanyu Veerakumarasivam, Assistant Professor and Director of Scientific Foundations of Medicine at the Perdana University Graduate School of Medicine. Dr Abhimanyu plans to pursue his research on the identification of molecular markers for the diagnosis, prognosis and therapy of bladder cancer through greater molecular understanding of the disease.

The other recipient is Dr Natrah Fatin Mohd Ikhsan, a Senior Lecturer at the Department of Aquaculture, Universiti Putra Malaysia. She holds the position of Treasurer at the Malaysian Fisheries Society. Dr Natrah plans to pursue her research in understanding molecular microbial ecology towards sustainable agriculture production.

Applications for the 2013-2014 Merdeka Award Grant for International Attachment closed on November 30, 2013. The recipients will be announced in 2014.

In 2013, the Merdeka Award also hosted the Merdeka Award Roundtables, a series of TV talkshows designed to inspire debate and discussion on key issues of interest to Malaysians.



Dr Natrah Fatin Mohd Ikhsan, recipient of the 2012-2013 Merdeka Award Grant for International Attachment



Assistant Professor Dr Abhimanyu Veerakumarasivam, recipient of the 2012-2013 Merdeka Award Grant for International Attachment



The 5th Merdeka Award Roundtable that was held at GALERI PETRONAS.

First launched in August 2011, the Roundtables featured leading figures from Malaysia's corporate, academic and social spheres, coming together to discuss issues critical to the future of this nation.

The latest Roundtable was aired on August 17, 2013, featuring the topic "Taking Malaysian Values to the Global Stage" with three distinguished panelists – Anas Zubedy, author, social commentator and corporate trainer, celebrated Malaysian cartoonist, Datuk Mohd Nor Khalid (better known as LAT), as well as Datin Paduka Mother A Managalam A/P S Iyaswamy Iyer, President of The Pure Life Society and Recipient of the 2010 Merdeka Award. Hosted by Datin Sri Bettina Khan, it was held at GALERI PETRONAS, a fitting venue that showcases the best of Malaysian visual arts.

In December 2013, four organisations – the Merdeka Award, GALERI PETRONAS, the Academy of Sciences Malaysia and the Nobel Museum – came together in a celebration of excellence to present two concurrent exhibitions titled "Merdeka Award & Sketches of Science Exhibitions: Celebrating the Culture of Excellence".

Launched by the Chairman of the Merdeka Award Board of Trustees, His Royal Highness Raja Dr Nazrin Shah Ibni Sultan Azlan Muhibbuddin Shah, the Regent of Perak Darul Ridzuan, the exhibitions were a tribute to the relentless pursuit of excellence and commitment of recipients of the Merdeka Award and the Nobel Prize.

Seventeen Malaysian artists, including Dato Azman Yusof, Gan Chin Lee, Jeganathan Ramachandram and Hairani Mohammad, were commissioned by GALERI PETRONAS to portray the Merdeka Award recipients in interesting perspectives and different media to further enrich the exhibition experience.

The Merdeka Award exhibition was held alongside the Nobel Museum's "Sketches of Science" exhibition, which took the complex discoveries made by Nobel Laureates and added a creative element that expressed well on paper. The "Sketches of Science" exhibition was brought to Malaysia by the Academy of Sciences Malaysia (ASM).

Nomination & Selection

The nomination and selection of Merdeka Award recipients are administered by the Board of Trustees and six committees – five Nomination Committees and one Selection Committee.

The Board of Trustees comprises two representatives from PETRONAS and one representative each from ExxonMobil and Shell, as well as two independent members.

The Board of Trustees and the various committees go through a long and rigorous selection process that reflects the high ideals of the Merdeka Award.

The committee members are made up of eminent Malaysians and non-Malaysians, bringing with them a wealth of knowledge, experience and expertise to allow them to nominate and select outstanding individuals and/or organisations that have laboured tirelessly, with great sincerity and conviction for the good of this country and its people.

Each year, the committee members will deliberate, examine the merits and finer qualities of each nominee, and in the end, identify those who stand above and beyond the rest, in their embodiment of the Merdeka spirit.

Categories & Recipients 2013

EDUCATION AND COMMUNITY

Tan Sri Dato' Seri Utama Arshad Ayub
(Joint Recipient)

For outstanding contribution in shaping Malaysia's education landscape through the development of professional education, education reforms and innovation that have resulted in education becoming more accessible to Malaysians.

&

Raja Tan Sri Dato' Seri Utama Muhammad Alias Raja Muhammad Ali
(Joint Recipient)

For outstanding contribution to rural development and rural reform through organising successful land settlement projects (FELDA) for the many landless, rural population in Malaysia.

ENVIRONMENT

Dr Lim Boo Liat

For outstanding contribution to the conservation of Malaysia's biological diversity through the study, understanding and control of vector-borne diseases and the relationship between diseases and the environment; and for advocating the protection of our natural heritage.

HEALTH, SCIENCE AND TECHNOLOGY

Tan Sri Dato' Dr Yahya Awang

For outstanding contribution to pioneering the development of clinical research and cardiac surgery in Malaysia and for his instrumental role in the establishment of the National Heart Institute (IHN).

OUTSTANDING SCHOLASTIC ACHIEVEMENT

Emeritus Professor Dato' Dr Lam Sai Kit

For outstanding contribution to scholarly research and development in medical virology and emerging infectious diseases including dengue.

Education & Community

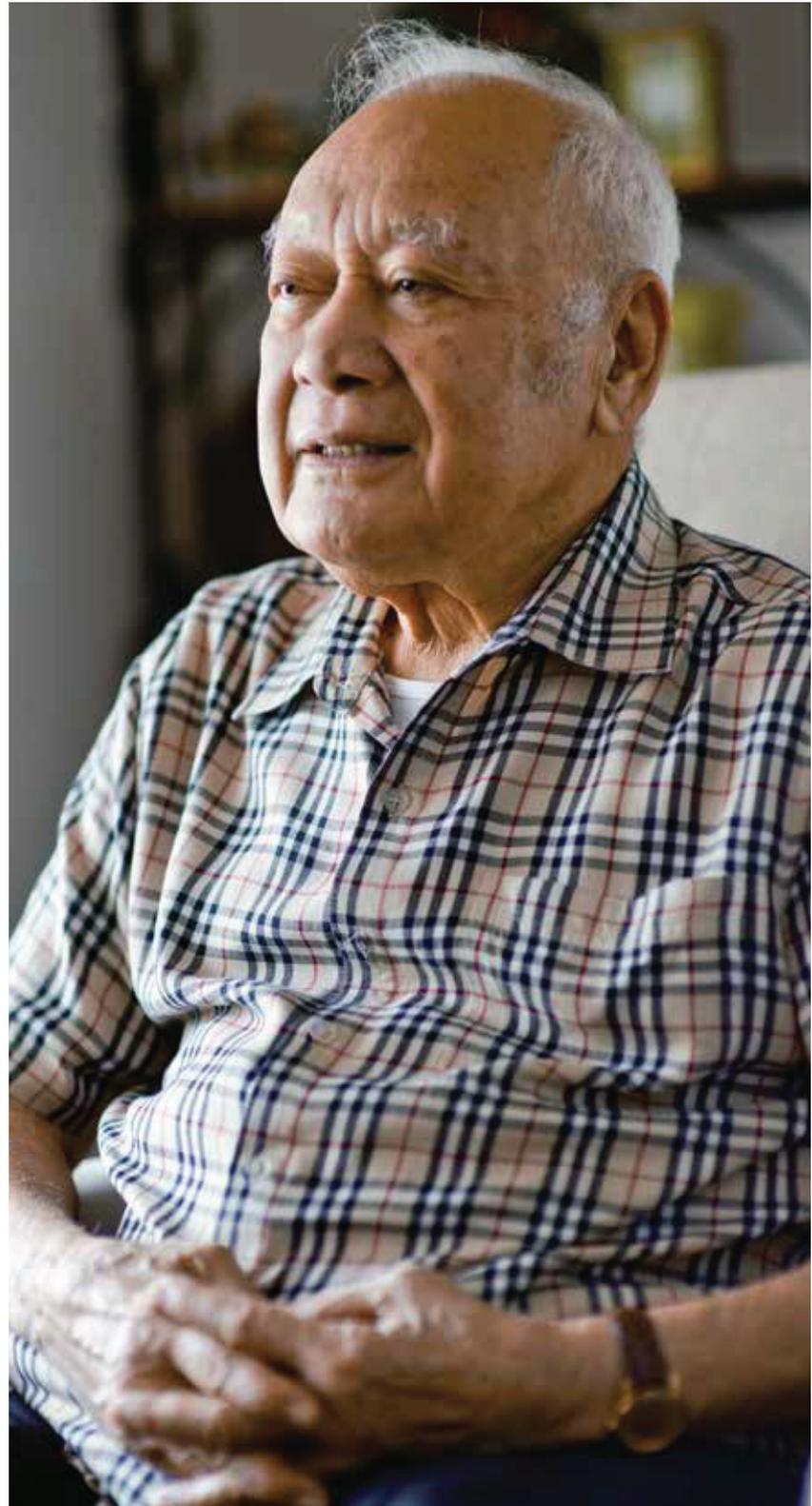
Awarded to individuals and/or organisations to honour exceptional thinking and research in strengthening the educational infrastructure of Malaysia, in elevating the level of education and in benefiting the marginalised.



TAN SRI DATO' SERI UTAMA ARSHAD AYUB

PROFILE

Tan Sri Dato' Seri Utama Arshad Ayub was born in Muar, Johor on 15 November, 1928. The oldest child in a modest rubber tapper family, Tan Sri Arshad was raised in an environment of hardship and poverty. He suffered from typhoid, and following the death of his parents, was tasked with the responsibility of raising his four younger siblings. As a poverty-stricken and deprived child living in the decade before the Second World War, the future seemed bleak. Yet through sheer determination, diligence and discipline he overcame great odds to rise above the trials and tribulations of his early life. In fact, it was those difficult early years which were so formative to his subsequent calling as an educator and civil servant. His experience of poverty made him all the more determined to help disadvantaged children overcome their adverse circumstances through education. As he says, "I was exposed to poverty so I understand what poverty is."



Not one to be easily discouraged, Tan Sri Arshad took on every educational opportunity afforded him to advance and improve his position in life. In 1954 he graduated with a Diploma in Agriculture from the College of Agriculture in Serdang, Selangor. He was awarded the Colonial and Development scholarship in 1953 to study at the University College of Wales Aberystwyth in the United Kingdom, graduating with an Honours degree in Economics and Statistics in 1958. In 1964, Tan Sri Arshad obtained a Diploma in Business Administration from the Management Development Institute in Lausanne, Switzerland (now IMD).

Tan Sri Arshad's involvement in education began in 1965 as the Principal of the MARA College of Business and Professional Studies. In 1967 Maktab MARA was transformed into Institute Technology MARA (ITM) of which Tan Sri Arshad became the First Director serving with courage and determination from 1965 to 1975. He laid the foundation for the Institut Teknologi MARA (now UiTM) and led one of the most successful education initiatives in the country.

Tasked by the late Prime Minister Tun Abdul Razak bin Hussein, with the challenge of remedying the under representation of Bumiputra in the professions, Tan Sri Arshad relinquished well-trodden paths and blazed new trails. He assembled a multiracial team of educationists with the right mix of courage and passion to do things not done before. He told his staff that everyone can be educated. He believed that among the young there are many

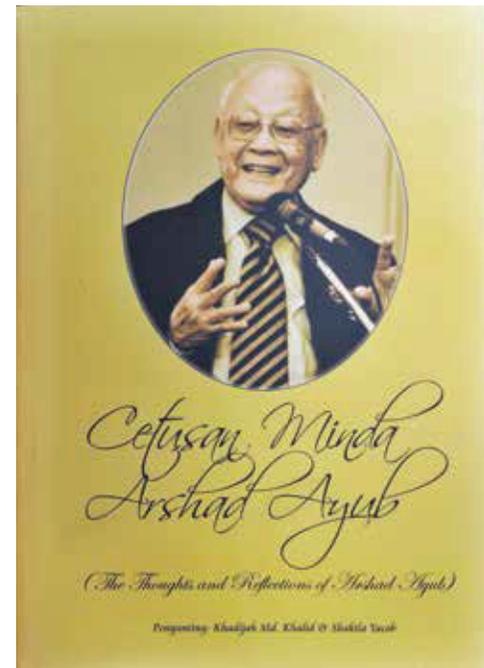
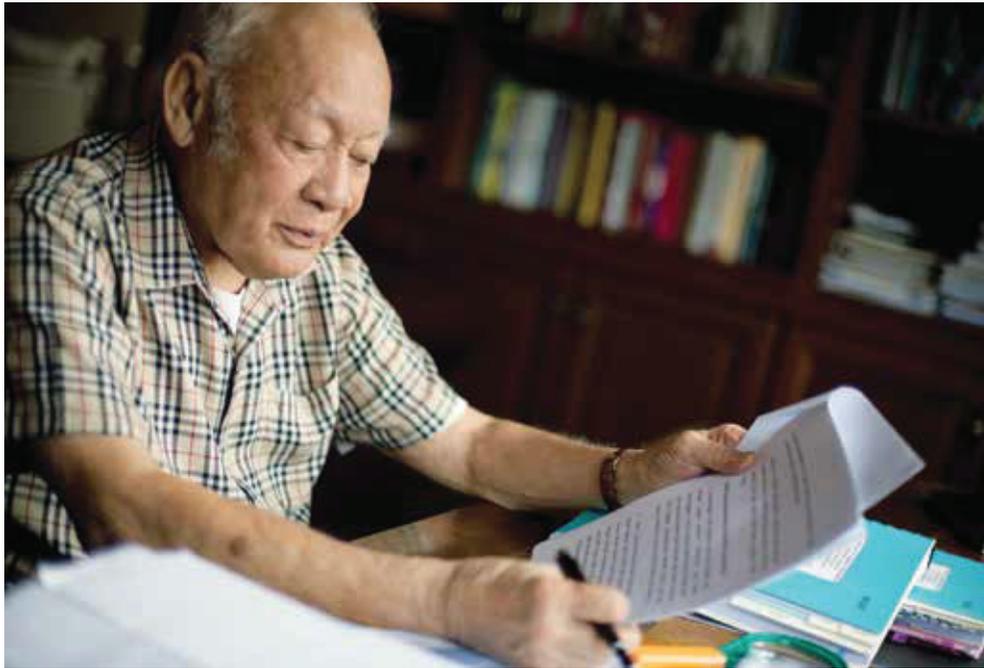


“late bloomers” who are largely ignored by the prevailing education system.

Tan Sri Arshad played a critical role in UiTM's formative years by nurturing it with concepts and programmes then unknown and unexplored in the higher education sector in Malaysia. He believed that entry points into tertiary courses should be flexible but exit points must be well regulated. Planning for years ahead, he was the first in the country to introduce courses in applied science, mass communications, business management, architecture, public administration (Plantation Estate Management) and hotel catering at the tertiary level. Such courses were unheard of in the 1960's.

Long before other institutions embraced the innovation of twinning programmes, where Malaysian students were able to get a quality education abroad at a fraction of the cost, Tan Sri Arshad teamed up with Ohio and Kentucky universities in the United States to pioneer “twinning programmes” that today are the rage at many centers of tertiary education in the country.

Tan Sri Arshad also made UiTM the first Malaysian institution to embrace external UK programmes in law and professional accounting such as LLB, ICSA and ACCA. In the 1960s, UiTM was the first institution in Malaysia to offer the prestigious Association of Chartered Certified Accountants (ACCA)



programme. Likewise, under Tan Sri Arshad, UiTM was the first institution in the country to offer full-time education for the well-respected LLB (London) external degree. He stuck to English as the medium of instruction and changed the students' diet, bread for breakfast and sandwiches for lunch, and introduced students to individual counseling and guidance.

ITM was Tan Sri Arshad's gauntlet. He put his heart and soul into its beginnings, nurturing it with concepts and programmes then unheard of in the higher education sector. The fact that the students were in some ways "late bloomers" like him, spurred him on. For the thousands of school leavers who were not qualified for a place in University Malaya (the only one then) the visionary Arshad gave them an alternative to get an education. As he says, "Life is never

perfect but you must make the best use of what is given." There is no doubt that he was directly responsible for the conversion of ITM from a time and place where students took external British examinations, to an institution offering a long list of professional courses, and secure an ITM diploma and later, a degree.

When Tan Sri Arshad opened UiTM's doors in 1965, the student population was only 219 with just 11 lecturers. When he left in 1975, there were 6,856 students and 904 lecturers serving 60 programmes in 13 different schools and branch campuses in Kota Kinabalu, Kuching, Arau (Perlis) and Dungun (Terengganu). Today UiTM is the nation's largest institution of higher learning in terms of size and population.

CONCLUDING REMARKS

Tan Sri Arshad is widely regarded as a far-sighted educator who has had a tremendous impact on business and education in Malaysia for nearly half a century. He fervently believes that a second chance is everyone's right especially if there are no initial environmental disadvantages. It is no exaggeration to say that he gave hope to many young Malaysians who had little or no hope for an academic future. From an early age he knew what it was like to be poverty-stricken, and that to gain a footing in the "land of opportunities" one had to go to school. Without education, no form of liberation – mental or physical – can take place. He learned the attributes of determination, resourcefulness and hard work early in life.

Following his time at ITM Tan Sri Arshad steadily climbed the ladder of the civil service to reach the rank of Secretary General of three Ministries by the time he retired in 1983. These were the then Ministry of Primary Industries, Ministry of Agriculture, and the Ministry of Land and Regional Development. In addition, Tan Sri Arshad was appointed as member of the Harun Salary Commission for statutory bodies and was also entrusted with responsibilities as Deputy Governor of Bank Negara, Malaysia's central bank. He also served as the Deputy Director General of the Economic Planning Unit.

Today, Tan Sri Arshad continues to sit on the board of a number of public agencies and private corporations, besides serving on the board of numerous non-profit and voluntary organisations. As a former civil servant par excellence and Chairman of the Board of Directors of University of Malaya as well as Pro-Chancellor of the Universiti Teknologi Mara (UiTM), he is also Chancellor of INTI International University College and KPJUC University College Of Nursing & Health Sciences, Governor of Kolej Tuanku Jaafar, Vice Chairman of Lembaga Bersekutu Pemegang Amanah Pengajian Tinggi Islam Malaysia and member of the Board of Bistari Johore Berhad. Tan Sri Arshad has a deep interest in the role of academia in producing a new generation of national leaders as well as in contributing to human capital development and the nation-building process.



Aberystwyth Recognition - Arshad and Zaleha with their children in Aberystwyth in celebration of his honorary award. From left: Azmir, Azmi, Azlin, Arshad, Zaleha, Soraya (daughter-in-law) and Azman, 1995.

ITM offered Tan Sri Arshad many defining moments. His 10 years with ITM allowed him to achieve the basic educational goals as enshrined in the New Economic Policy (NEP). Life after ITM sees him continue to contribute to a growing educational sector and industry. His unerring commitment and dedication in shaping Malaysia's education landscape through education reforms and innovation truly personifies the *Spirit of Merdeka* and its pursuit of excellence.



On the go - Arshad believed strongly in living a full student's life and was keen in all activities, sports, cultural activities and literary development programmes. Badminton was one of his favourite games and he excelled in it.



RAJA TAN SRI DATO' SERI UTAMA MUHAMMAD ALIAS RAJA MUHAMMAD ALI

PROFILE

Raja Tan Sri Dato' Seri Utama Muhammad Alias Raja Muhammad Ali was born in Kuala Pilah, Negeri Sembilan on 10 August, 1932. As the eldest son in a family of nine, Raja Alias was conscious of the need to set a good example for his younger siblings. He maintained an impressive academic record throughout his primary and secondary school years completing his early education at Tuanku Muhammad School in Kuala Pilah and subsequently at King George V School in Seremban.

Always mindful of his responsibilities, his father's position as a Settlement Officer and penghulu or mukim chief gave Raja Alias early exposure to the duties and obligations of a civil servant. From a very young age, Raja Alias was drilled with the values he espouses religiously until today, that is: "Work hard, lead an honest life, care for people, assist them when they need your help and never betray their trust."



In 1958, Raja Alias graduated from the University of Malaya, Singapore, with a Bachelor of Arts with Honours in Geography. He joined the Malayan Civil Service in 1958 and served at district, state and federal levels before being seconded to the Federal Land Development Authority or FELDA in 1966.

Raja Alias helmed FELDA for more than three and a half decades from April 1966 as Deputy Chairman until his retirement from the post of Group Chairman in June 2001. Over a span of 35 years, Raja Alias was closely involved with efforts aimed at developing FELDA into a well-integrated corporation with operations in all aspects of the oil palm/rubber industry from commercial cultivation right up to the value-added stage of palm oil and rubber processing and the manufacturing of consumer products derived from palm oil and rubber.

Raja Alias and his team pioneered a unique system of land reform - spearheaded by the Government - that saw the growth of FELDA from a semi-governmental authority to its current position as a corporate entity involved in various downstream and upstream activities of the oil palm and rubber industry. Raja Alias shaped FELDA into a more human-oriented enterprise. By recognising and mobilising the initiatives of settlers, he fostered new communities with a growing sense of self-reliance. As he says: "One must be prepared to be innovative in order to move forward." A thorough planner, he unassumingly organised a team of high-calibre staff to manage the organisation.

With his dedication and passion he was able to demonstrate that even on some of Malaysia's less fertile, lateritic soils, once indigent families can generate productive agriculture and contribute to the community and national well-being.

It is to Raja Alias' credit that by the time he retired from the organisation he had led for 35 years, a strong foundation had been laid and the stage had been clearly and intricately set for the FELDA Group to progress to its next mission. FELDA by then had evolved into three unique entities: FELDA; FELDA Investment Cooperative; and FELDA Holdings Bhd. (FHB). This structure has proved successful, with both settlers and staff continuing to benefit financially as the annual profits from FHB flow back to them in the form of dividends from the FELDA Investment Cooperative.

Today, FELDA has expanded dynamically via the ownership of profitable agriculture-related businesses in upstream oil palm plantations and downstream activities worth billions of ringgit, spearheaded by its new business entity FELDA Global Ventures Holdings Bhd (FGVH). FGVH has business interests in 12 countries, across four continents, overseeing a land-bank of over 800,000 hectares and employing 19,000 people.

Raja Alias was awarded the prestigious Ramon Magsaysay Award in 1980 for Government Service in recognition of "steadfast, principled administration in transforming Malaysia's land for the landless schemes into prosperous realities." During his book launch in 2009, Prime Minister Dato' Sri Mohd Najib bin Tun Haji Abdul Razak described Raja Alias as an iconic leader who is not only an "architect" but an action-



Tun Abdul Razak visiting Jengka, Pahang, 3 February 1972



oriented “contractor” instrumental in transforming the organisation at all levels.

At the international level, Raja Alias was the first Asian to be elected President of the International Association of Seed Crushers in 1997. In assuming this position, he led the way for Malaysia to take its rightful place as a leading player in the vegetable oil industry. Various tributes and awards have been accorded on Raja Alias for his outstanding contribution to socio-economic achievements. These include tributes from The Commonwealth Development Corporation, The World

Bank and the Asian Development Bank.

In 1998, Raja Alias set up Yayasan FELDA and became its Founding Chairman. A charitable foundation funded by a percentage of the annual profits of FELDA Holdings and FELDA, Yayasan Felda aims to elevate the national standards of education, health, research & development, welfare and cultural heritage. As he says: “Whatever your position in life you should be able to help a few.”

During his time at FELDA, Raja Alias was able to crystallise the vision of then

Prime Minister Tun Abdul Razak bin Hussein, “to provide land to the landless and jobs for the jobless”. The history of FELDA will always feature Raja Alias as the person who made a tremendous contribution towards FELDA’s growth and success. He had a long and illustrious career with impressive performance as the Director General and Chairman of the FELDA Group for more than 30 years. Under his dynamic stewardship, FELDA scaled new heights of achievement in land development and poverty eradication in the rural sector of the Malaysian economy. FELDA has since been recognised as a key agency in the effort to eradicate rural poverty in Malaysia and its model has been applied in other countries such as Myanmar, Cambodia and nations in Africa. FELDA’s model of agrarian reform has also been used and adopted by institutions such as the World Bank to promote land reform in developing countries.

CONCLUDING REMARKS

Raja Alias was successful in overcoming the most difficult obstacles in transforming the lives of the rural community and putting Malaysia on the world map in agriculture. Today, FELDA has become more than just a land development agency. It has improved the living standards of the rural community by providing a stable income and modern infrastructure facilities. Raja Alias says: “I was driven to perform by the thought that achieving the targets set would provide many with an improved lifestyle or at the very least could lessen



their burdens. This was one of my primary motivations and until today, the mere sight of thriving, successful FELDA schemes provide reward enough and has been a source of immeasurable satisfaction.”

Raja Alias remains active in plantation development through various public listed companies, notably as the Chairman of Kuala Lumpur Kepong Bhd, and Board Member of Batu Kawan Bhd. Raja Alias is also involved in community and welfare activities through KLK Foundation and the Tan Sri Lee Loy Seng Foundation.

Raja Alias has had an illustrious career distinguished by his selfless duty, nobility of spirit, leadership skill and intellectual capability. Together with

a home-grown management team, he successfully transformed FELDA from a land settlement agency into a huge conglomerate of companies that operate beyond the shores of the country in his quest to add value to the activities of the plantations. During his three and a half decades in FELDA, he collaborated with the private sector in an effort to bring benefits to FELDA, the officers, and the settlers.

Raja Alias belongs to that era of Malaysians whose lives span significant and important periods in the nation’s history, namely the colonial era under British jurisdiction and the post-independence period of self-rule and nation-building. He opted for a life of public service, knowing that the growing nation had great need for dedicated



Raja Alias and wife, Hafsa Mohd Yusof, Penang, 16 January 1962

citizens with education and skills. In doing so he has joined the ranks of select individuals whose actions have left an indelible mark on the lives of many, in particular the rural community. Certainly, Malaysians can draw inspiration from Raja Alias and share a sense of pride at his many accomplishments. His unerring commitment to rural development and reform truly reflects the *Spirit of Merdeka* that aims to foster a culture of excellence.

Environment

Awarded to individuals and/or organisations to honour the development, research and application of new technology and practices in renewing and protecting the environment.



DR LIM BOO LIAT

PROFILE

Dr Lim Boo Liat was born on August 21, 1926. He was only 16 when World War II came to Malaya. The war disrupted his studies and he had to work to help support his family. Matters took a turn for the worse when his father passed away during the War. “I did all kinds of things (odd jobs),” he says. “I did whatever came my way, like selling vegetables.”

However, Dr Lim’s destiny changed when he applied and was accepted for a temporary post as a Lab Assistant at the Institute for Medical Research (IMR), Kuala Lumpur in 1947. His temporary stint turned into a permanent job when he was promoted in 1952 to the position of permanent Lab Assistant. As a permanent staff of the IMR, Dr Lim was involved in scientific expeditions and projects in Borneo, Vietnam, Laos, Cambodia and Thailand under the auspices of the Bishop Museum, University of Hawaii that focused on the study of parasites and small mammals. He also had the opportunity, during this time, to help start the National Zoo, working together with such notable people as the late Tan Sri V M Hutson and the late Datuk Kington Loo as well as officers from the Department of Wildlife and National Parks Malaysia (DWNP). He was also instrumental in the revival of the Malaysian Nature Society (MNS) – recipient of the Merdeka Award in 2008 – in 1948 after its long hiatus during the Second World War.

Dr Lim’s interest and dedication to his job soon won him recognition. In 1959, he was offered a Sino-British Fellowship Trust Award under the British





Council. He spent the next one and a half years studying animal ecology at Oxford under the tutorship of Prof. Charles S. Elton, and Prof. George Dunnet at Aberdeen University, and the taxonomy of mammals at the British Natural History Museum under John Edward Hill in Britain. He returned to Kuala Lumpur in 1961 and headed the Medical Ecology division of the IMR and, by 1969, he had successfully published 80 scientific papers in various journals. This was a particularly important achievement as he was later offered a Medical Research Council Fellowship (London) and the opportunity to pursue a Master's Degree in Science at the University of Aberdeen. He says: "They accepted me because of my publications and I was

later nominated to be a member of the Biological Society in London."

Armed with a Masters in Science, Dr Lim returned once again to the IMR in 1972 to continue his work. He was subsequently promoted to the position of Zoologist and began running the Medical Ecology division there. In 1977 he completed his PhD in Zoology at Universiti Sains Malaysia and was seconded to the World Health Organisation (WHO), in Indonesia where he headed the Vector Biology Control Research Unit in charge of conducting research on such subjects as plague, malaria control and, also, rodent control. Dr Lim retired from WHO in 1987. Then he was honorary advisor to the Department of Wildlife and

National Parks, Kuala Lumpur (DWNP) in establishing a research laboratory for small animals (mammals, reptiles and amphibians) ecology. Meanwhile he continued to work as a consultant on small mammal research with the Forest Research Institute of Malaysia (FRIM). At the same time he was also a consultant to DANCED-Management of Krau Wildlife Reserve, Pahang. He was appointed as a Visiting Scientific Fellow at the Institute for Environment and Development, Universiti Kebangsaan Malaysia. He also served as an adviser to the Malayan Nature Society (MNS) where he is an Honorary Member.

Dr Lim, in 1995 was selected for the Science and Technology Award by



Malaysia Toray Science Foundation (MTSF) in recognition of his outstanding achievements in vertebrate ecology and zoonotic diseases in the environment. Later, in 2007, he was elected as a fellow (FASc) by Akedemi Sains Malaysia in recognition of his scientific research work in the country.

Dr Lim is regarded as a pioneer in the field of zoology in Malaysia. He has dedicated his professional life to working in bio-medical research on small animals in relation to zoonotic diseases. In his

studies he found that parasites and food habits of small mammals were good indicators of their behavioural habits in their natural environment. He, thus developed the concept of “ecological labeling” by parasite pattern. This concept of “ecological labeling” by parasite pattern has since been accepted by animal behaviorists and mammalogists around the world. The findings of this study were published in the *Journal of Zoology, London* in 1967.

In recognition of his distinguished service to the science of mammalogy, Dr Lim was awarded an Honorary Membership to The American Society of Mammalogists (ASM) in 2003. This makes him the first South-East Asian, to become an Honorary Member of the ASM, an award that dates back to 1919.

Dr Lim has made significant contribution to the publication of the Red List of Mammals of Peninsular Malaysia. It took 50 years of field research on the mammals of Malaysia to acquire a thorough knowledge of the ecology of each of the small mammal’s species diversity in its natural environment. The publication of the Red List is considered to be the first national Red List and was published by the Department of Wildlife and National Parks in 2010.

Dr Lim and his colleague, Dr Heyneman D. in their studies of the rat-lungworm (*Metastrongylus cantonensis*) that causes human eosinophilic meningitis discovered a “new mode of transmission” to humans through eating raw lettuce

contaminated by the infective larvae. *Science, 158. USA. 1967.*

Dr Lim with his colleague Dr Illar Muul, constructed the first Aerial Walkway in 1968 at Bukit Lanjan Forest Reserve, Sungei Buloh, Selangor to study the canopy of the rainforest and its canopy inhabitants (vertebrate and invertebrate, plants) and vectors of diseases. This concept has now been developed in national and private parks around the country for both commercial (tourism) as well as for research purposes and internationally as well. *Science, 169. USA. 1970.*

Studies on ectoparasites, particularly, the vector mites of scrub typhus found in foci areas in primary forests was due to immigration of field rat species (normal hosts of vector mites) due to environmental change through deforestation. *Trans. Roy. Soc. Trop. Med. Hyg. 1977, London.* This was further reinforced in his studies on the fauna of Peninsular Malaysia where he found that environmental change through deforestation has impacted species diversity. This study alerted government agencies to the realisation that critical lowland/hill habitats should not be further damaged. It also highlighted health agencies to the need to monitor the health status of the populace settling in the fringe forest areas. The study was published in the *Journal of Science and Technology in the Tropics* in 2008.

Dr Lim has authored several books such as *Poisonous Snakes of Peninsular Malaysia, Orang Asli Animal Tales,*

Turtles of Borneo and Peninsular Malaysia and Bats of Krau Wildlife Reserve, Malaysia. He has published 300 scientific papers on small mammals, reptiles and amphibian ecology, rodent control and bio-medical studies (zoonotic diseases) associated with terrestrial vertebrates and helminthic parasitology in various national and international journals.

Today, Dr Lim retains his position as Honorary Advisor on Zoology for the Department of Wildlife and National Parks (DWNP) where his vast experience and expertise continues to play an important role. He also continues to mentor both local and foreign young scientists from various local and foreign universities and research organisations.

CONCLUDING REMARKS

Dr Lim is regarded as a pioneer in the field of zoology in Malaysia as well as a leading authority in the conservation of Malaysia's biological diversity. He is the recipient of several awards including the Sandosham Gold Medal by the Malaysian Society of Parasitology and Tropical Medicine in 1978 for his parasitological research in Malaysia. Dr Lim has the honour of being the first South East Asian recipient of the Spallanzani Award by the North American Society for bat research (NASBR) in 2007. He also has a number of parasites and animals named after him: a chigger (larvae of a scrub typhus mite), flea, helminth (parasitic worm), protozoa, snake, lizard and frog. Always modest, about the praise and accolades he has received, Dr Lim credits his mentors and



Early days in the laboratory at the IMR, 1948

students for his success, “Everything is a learning process and I have learned a lot from those I have taught.”

Now a sprightly 87 year old, Dr Lim continues to mentor both local and foreign young scientists in research. He says: “The satisfaction to me now is that I am able to impart my knowledge to the younger generation.” He is also actively involved in developing integrated management plans for the Pahang state government, training wildlife officers and assisting postgraduate students. His immense expertise and knowledge has ensured that he continues to be sought

after for his advice and guidance from wildlife scientists around the world.

Dr Lim's six decades of scientific research and advocacy in protecting the nation's rich biodiversity has contributed immensely to the nation. He is an outstanding zoologist and has made significant contribution to the conservation of Malaysia's biodiversity and the protection of our natural heritage. His wide-ranging work has had significant impact on Malaysia and Malaysians and it truly embodies the *Spirit of Merdeka*.

Health, Science & Technology

Awarded to individuals and/or organisations to honour the creation, development, support and application of new and innovative technology that improve the lives of people everywhere.



TAN SRI DATO' DR YAHYA AWANG

PROFILE

Tan Sri Dato' Dr Yahya Awang was born in Singapore on September 7, 1950. He graduated as a medical doctor from Monash University, Melbourne in 1974. Following his graduation, he served as a medical officer in Hospital Johor Bahru and Kota Tinggi.

He was trained as a Surgical Registrar in Hospital Kuala Lumpur and pursued his postgraduate training in the United Kingdom by obtaining the FRCS (Glasgow) in 1980. He trained as a Cardiac Surgeon from 1980 to 1983 at the Brompton Hospital in London.

Upon his return to Malaysia, Dr Yahya was faced with a large number of patients with heart disease requiring surgical intervention. At the time, cardiac surgery was in its infancy and there were inadequate facilities and medical personnel to cope with the number of patients requiring open-heart surgery. Many of the patients on the long waiting list either did not survive the wait or resorted to getting treatment abroad.

It was at this time that Dr Yahya played a significant and pioneering role in the development of cardiac surgery in Malaysia.



“My priority at the time was to treat as many patients as possible with the limited resources available. At General Hospital Kuala Lumpur, with only one operating theatre, my team and I were able to perform over 1,000 cases (surgeries), which included surgery for coronary heart disease, valvular and congenital heart disease,” he says.

“With the growing demand, we needed to also train and educate more doctors and medical personnel,” he adds.

Dr Yahya spent 25 years at the General Hospital Kuala Lumpur and subsequently at the National Heart Institute (IJN) as Head of Cardiac Surgery. Over a span of 30 years as a Cardiac Surgeon, Dr Yahya performed no less than 5,000 open-heart surgeries and trained more than 50 Cardiac Surgeons.

With a dedicated and trained team, he successfully performed the first Heart Transplant in Malaysia on 18 December 1997. The success of this operation and other cardiac surgeries performed, enhanced the confidence of the Malaysian public to have cardiac surgical procedures locally.

Dr Yahya was instrumental in training cardiac surgeons and cardiac paramedics to meet the needs of the nation. Following the establishment of cardiac centres at the Hospital Kuala Lumpur and IJN, today Cardiac Surgical Services are available throughout Malaysia. From an initial number of three in 1984, there are currently 57 Cardiac Surgeons in Malaysia and more continue to train and be trained.



Dr Yahya, together with colleagues, pioneered the establishment of the National Heart Institute (IJN). During his tenure at IJN, he established the Clinical Research Unit, which enabled the Institute to undertake various clinical research and collection of relevant clinical data in Cardiac Surgery. He has published 23 scientific papers in local and international scientific journals and made 15 presentations at various conferences. With his appointment

as President of the Asian Cardiac Surgical Society (1992-1994), he led and represented Malaysia in numerous International Conferences on Cardiac Surgery. This has put Malaysia on the regional map as an excellent training centre for cardiac surgery and has attracted trainees from Indonesia, Japan, Yemen, Myanmar and Bangladesh. In addition, he founded the IJN Foundation, an organisation that provides financial assistance to financially disadvantaged



patients requiring cardiac surgery, scholarships for cardiac trainees and research on Heart Diseases.

Cardiac surgical services has contributed towards Medical Tourism in this country, attracting patients from neighboring countries such as Indonesia, Brunei, Myanmar and the Middle East.

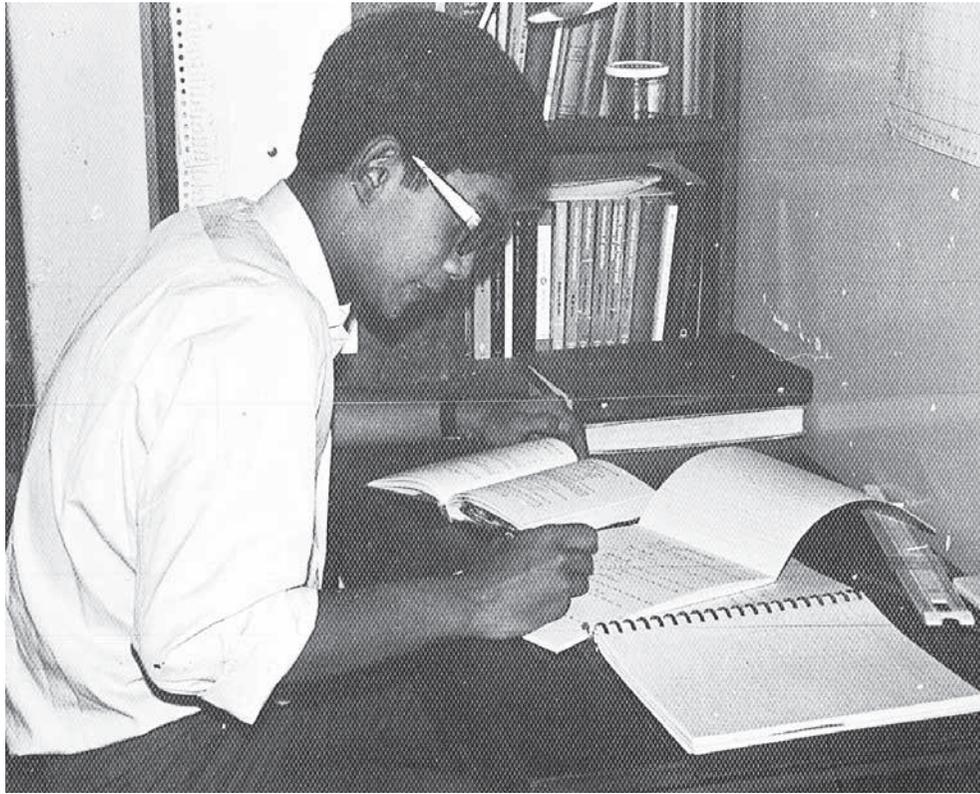
Dr Yahya and his colleagues founded the Malaysian Cardiac Surgical Society and he became it's founding President in 1992. The society currently plays an active role in regulating standard, credentials and accreditation of cardiac surgical services in Malaysia.

Besides the major centres under the Ministry of Health hospitals, Dr Yahya



also assisted in the establishment of Cardiac Surgery Services in UKM and USM, Kubang Kerian. He performed the first Open-heart Surgeries in these two University Hospitals.

Dr Yahya is currently the Consultant Cardiothoracic Surgeon at Damansara Specialist Hospital. He was the Chairman of the National Transplant Registry and a Council Member of the Association of Thoracic and Cardiovascular Surgeons of Asia and was recently appointed as the Pro-Chancellor of University Technology Malaysia (UTM).



Studying in boarding school in Melbourne, preparing for university entrance exam, 1968

CONCLUDING REMARKS

In reflecting the unyielding and indomitable *Spirit of Merdeka*, Dr Yahya pioneered and elevated the practice of cardiothoracic surgery and education in Malaysia to international standards. He continues to be an inspiration and a role model for aspiring medical doctors and surgeons in the country.

Dr Yahya's many professional achievements include performing open heart surgery; pioneering the establishment of The National Heart Institute of Malaysia in 1992; and performing the first Heart Transplant in Malaysia in 1998. He is the author of many scholarly and professional articles.



Dr Yahya receiving the Panglima Setia Mahkota (PSM) award from Yang di-Pertuan Agong Tuanku Syed Sirajuddin

Outstanding Scholastic Achievement

Awarded to a scholar conducting or playing
a major role in academic research resulting
in significant discovery.



EMERITUS PROFESSOR DATO' DR LAM SAI KIT

PROFILE

Professor Dato' Dr Lam Sai Kit, was born in Ipoh, Perak on June 23, 1938. He received his early education at the Anglo Chinese School in Ipoh where his proficiency in math and science was apparent from an early age – a glimmer perhaps of the illustrious future that was to come. He received his Bachelor of Science from the University of Western Australia, and subsequently a Master of Science from the University of Queensland. It was at the University of Queensland, in 1963, where he was initially introduced to medical research. Later, while pursuing his Doctorate from the Australian National University his PhD research on viruses and wildlife further stimulated his interest in the field of epidemiology.

In 1966, even before completing his PhD, Professor Lam was offered a position as a virologist at the new Faculty of Medicine at University of Malaya. Tasked with the responsibility of starting a new diagnostic unit from scratch Professor Lam overcame many challenges to make it the second functioning viral lab after the Institute of Medical Research. He says: "With lots of patience and whatever funds we could





raise, we managed to build up the lab as well as a dedicated team.”

In the years following, Professor Lam focused on new tools to diagnose viral infections. He initiated rapid viral diagnosis via an in-house ELISA technique which allowed the dengue virus to be diagnosed within the same day. These achievements led the Department being designated a WHO National Center for Rapid Viral Diagnosis in 1980 and a two year secondment in Geneva for Professor Lam. He says: “Working for WHO opened my eyes. Instead of thinking of national or even regional health issues, I started to think of global health issues.”

Through the four decades of his academic career, Professor Lam has advanced the frontier of knowledge in virology in Malaysia as well as the Asia Pacific region. The Asia Pacific Society for Medical Virology which he founded in 1982 still has over 600 members from

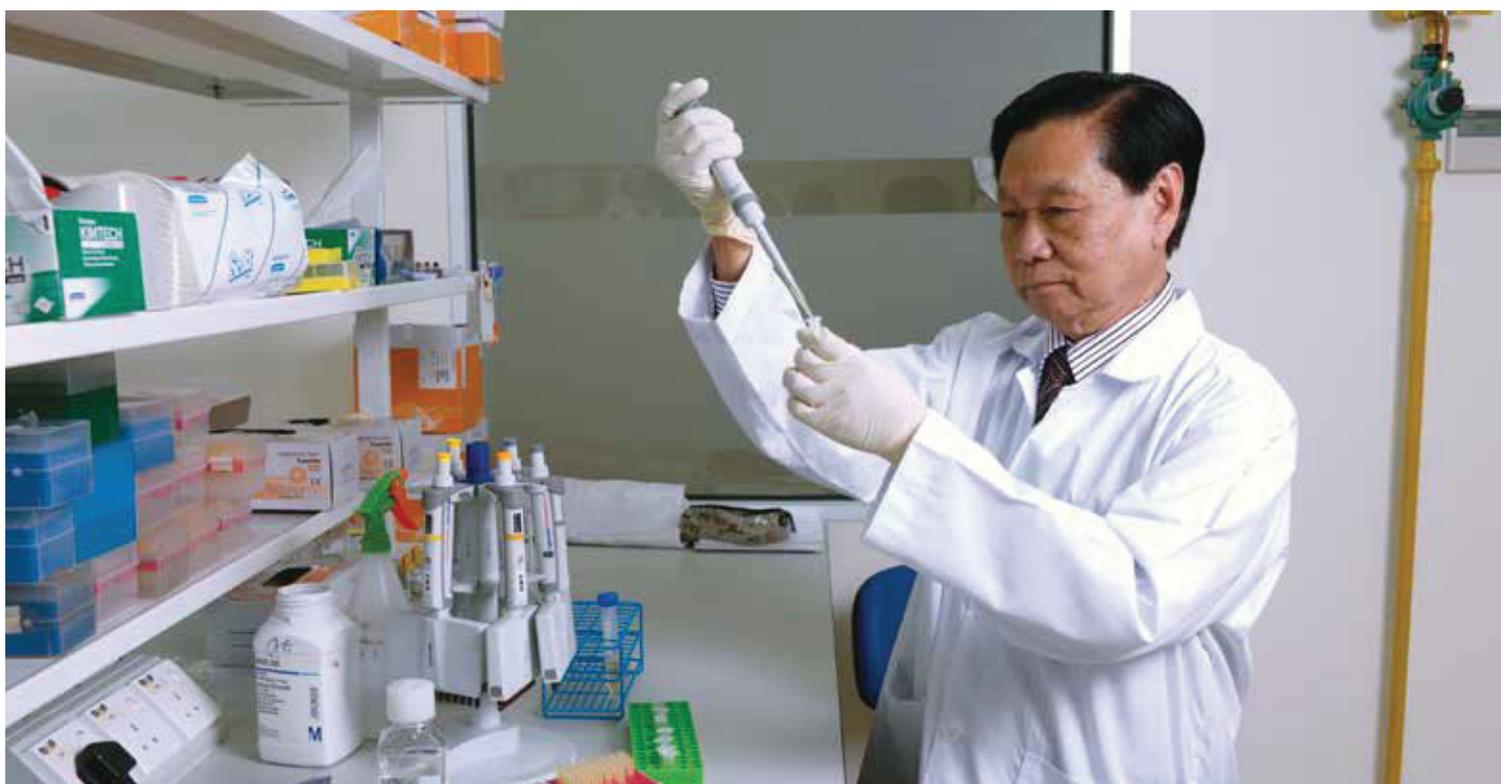
over 40 countries. His fundamental research has led to the publications of over 240 papers in some of the world’s top journals. The impact of this scholarly work has also contributed to disease management and disease spread. He says: “To be able to contribute towards the betterment of society through one’s profession provides immeasurable joy and a sense of fulfillment.”

Professor Lam’s research on the vector-borne disease, dengue, is recognised worldwide and has culminated in many awards, both nationally and internationally. Based on his outstanding contribution, he was awarded the Knight of the National Order of Merit, France (April 2006), one of the most prestigious honours conferred by the French Government, for his prominent role in medical research and scientific cooperation. Professor Lam also received the Prince Mahidol Award for Public Health from the King of Thailand in 2001.



Professor Lam has been actively involved in the WHO Programme on Emerging Infectious Diseases (EID) since 1990. Some of the EID discoveries by his team include:

- The discovery of EV71 and echovirus 7 viruses as etiological agents of fatal encephalitis during outbreaks of hand, foot and mouth disease which have contributed to the control of the spread of this disease.
- The discovery of chikungunya virus as a cause of polyarthritis in Malaysia was first made by his team and led to the control of the outbreak through vector control measures.
- The finding of a Hantavirus-like infection in Malaysia for the first time among rodents in Port Klang, and its possible association with renal diseases.
- The initiation of surveillance for some of the most important viral infections in the country (rotavirus diarrhea, human influenza, respiratory syncytial virus in young children,



- monitoring of hand-foot-mouth disease, etc.)
- As a member of the Nipah Encephalitis Investigating Team, University of Malaya, and recipient of the Merdeka Award in 2008, Prof Lam was involved in the discovery of the Nipah virus as a cause of viral encephalitis among pig farmers in the country. The discovery resulted in containing the outbreak.

His 40 years of research into dengue, a global public health problem in developing countries, has led to the reduction of morbidity and mortality of this disease. The advancement of knowledge includes the understanding of the immunopathogenesis of the disease, early diagnosis and early medical

intervention, and an early warning system, which helps in predicting severe dengue outbreaks.

Professor Lam has also helped promote rapid viral diagnosis for respiratory viral diseases, diarrhoeal diseases, neurological infections, and congenital infections by conducting technical workshops in various countries including Thailand, Myanmar, Mexico and in Africa. This has a significant impact on disease management and prevention of disease spread.

He has published over 240 scientific papers of which 78 are in ISI-listed journals with a total citation of 3,178 times and a H-index of 27. The H or Hirsch Index is an established

internationally-recognised index that measures both the productivity and impact of the published work of a scholar. The index is based on the set of the scholar's most cited papers and the number of citations that he/she has received in other publications.

Professor Lam currently serves as Emeritus Professor and High Impact Research Consultant at University of Malaya (UM). He is tasked with managing the Ministry of Education's special allocation given out to high impact research projects.



The conferment of the Dato' Paduka Mahkota Perak by the Sultan of Perak, 2002

CONCLUDING REMARKS

Professor Lam is among the most influential figures in medical virology in South East Asia. His research in dengue is recognised worldwide as well as by the World Health Organisation (WHO). In recent years, his involvement in emerging diseases has led to the discovery of new viruses in the region, and the isolation of the Nipah virus has been internationally recognised.

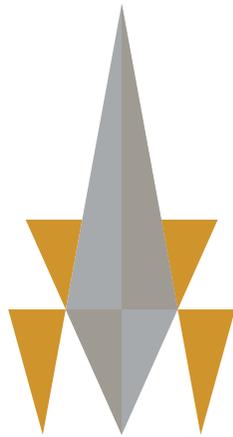
“The greatest sense of achievement is to see the younger generation benefitting from one’s passion, especially in the pursuit of scientific knowledge,” he says.

As a scholar, Professor Lam has advanced the frontier of knowledge in virology in Malaysia as well as in the Asia Pacific region. His relentless pursuit of excellence in research and contribution to the field of medical virology is a reflection of the innovative and pioneering *Spirit of Merdeka*.

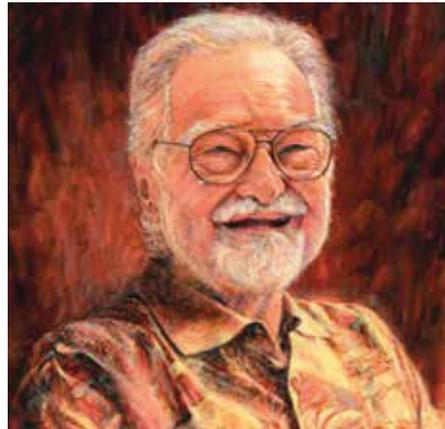


The conferment of Emeritus Professor by Universiti of Malaya, 2004

Merdeka Award Past Recipients



MERDEKA
AWARD
2008



EDUCATION AND COMMUNITY

**Royal Professor Ungku Abdul Aziz
bin Ungku Abdul Hamid**

*For outstanding contribution to the eradication
of poverty, rural economics, the development of
Tabung Haji and in the field of education*



ENVIRONMENT

Malaysian Nature Society (MNS)

*For outstanding contribution to the Belum-
Temenggor Forest Complex Conservation
Initiative.*



HEALTH, SCIENCE AND TECHNOLOGY

**Nipah Virus Encephalitis Investigation
Team from The Faculty of Medicine,
University of Malaya**

(Joint Recipient)

*For outstanding contribution to the discovery
and understanding of the causes, effects and
control of the Nipah encephalitis viral infection*



HEALTH, SCIENCE AND TECHNOLOGY

**Professor Emeritus
Dato' Dr Khalid Kadir**

(Joint Recipient)

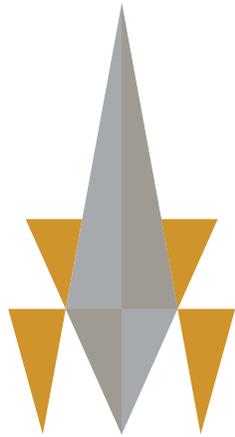
*For outstanding contribution to the study and
understanding of diabetes and the relationship
between hormones and stresses in various
tissues*



**OUTSTANDING CONTRIBUTION TO
THE PEOPLE OF MALAYSIA**

Datuk Leslie Davidson

*For outstanding contribution in the introduction
of the pollinating insects *Elaeidobius
kamerunicus* from Africa to the oil palm
plantations in Malaysia, leading to the rapid
development of the palm oil industry.*



MERDEKA
AWARD
2009



EDUCATION AND COMMUNITY

Tun Fatimah Hashim

(Joint Recipient)

For outstanding contribution to the empowerment of women in Malaysia and for protecting and securing economic opportunities for women through advocacy



EDUCATION AND COMMUNITY

Dato' Lim Phaik Gan

(Joint Recipient)

For outstanding contribution to the empowerment of women in Malaysia and for protecting and securing rights and economic opportunities for women through advocacy



HEALTH, SCIENCE AND TECHNOLOGY

Professor Dr Halimatun Hamdan

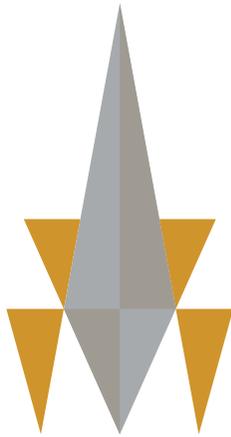
For outstanding contribution in the development and application of Maerogel as a commercially viable multi-purpose material



**OUTSTANDING SCHOLASTIC
ACHIEVEMENT**

Dato' Seri Ir Dr Zaini Ujang

For outstanding study and scholarly contributions in the various environmental initiatives concerning water supply, sewage, river rehabilitation and industrial ecology



MERDEKA
AWARD
2010



EDUCATION AND COMMUNITY
Datin Paduka Mother A Mangalam
A/P S Iyaswamy Iyer

For outstanding contribution in promoting the welfare of the underprivileged and for fostering national unity



OUTSTANDING SCHOLASTIC
ACHIEVEMENT

Professor Emeritus Dr Yong Hoi Sen
(Joint Recipient)

For outstanding contribution to the development of basic and applied knowledge of Genetics, Molecular Biology, Biological Systematics, Evolutionary Biology and Biological Diversity of Malaysian flora and fauna



OUTSTANDING SCHOLASTIC
ACHIEVEMENT

Professor Dr Harith Ahmad
(Joint Recipient)

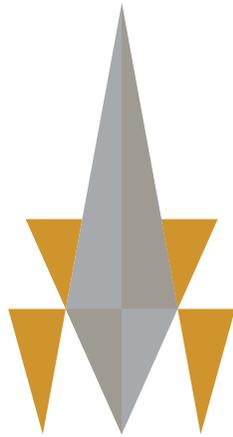
For outstanding contribution in research and promoting the development of photonics in Malaysia



OUTSTANDING CONTRIBUTION
TO THE PEOPLE OF MALAYSIA

Tan Sri Just Faaland

For outstanding contribution to the advocacy of equitable growth through eradication of poverty and reduction of socio-economic polarisation



MERDEKA
AWARD
2011



ENVIRONMENT
Dato' Dr Kenneth Yeang

For outstanding contribution to the development of design methods for the ecological design and planning of the built environment



**OUTSTANDING SCHOLASTIC
ACHIEVEMENT**

**Professor Dato'
Dr Goh Khean Lee**

(Joint Recipient)

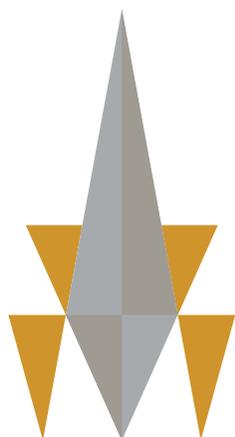
For outstanding contribution in elevating the study and practice of gastroenterology and hepatology in Malaysia to global standards



**OUTSTANDING SCHOLASTIC
ACHIEVEMENT**

Professor Dr Mak Joon Wah
(Joint Recipient)

For outstanding fundamental and applied research in parasitology and parasitic diseases, public health and pathology

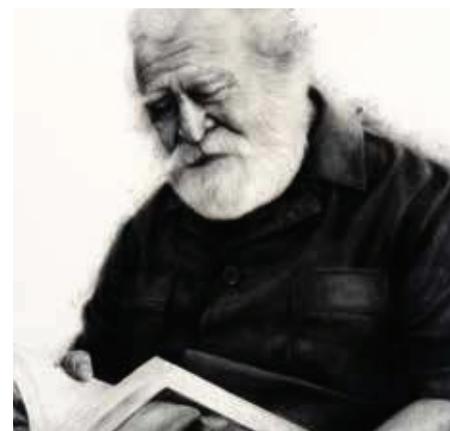


MERDEKA
AWARD
2012



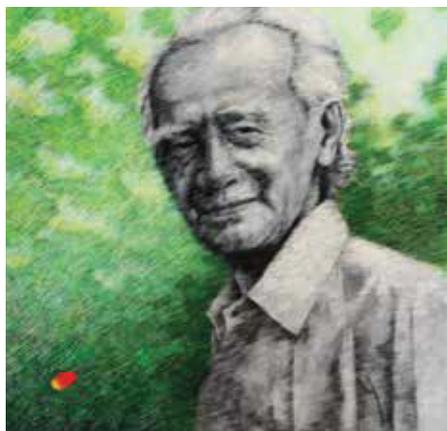
HEALTH, SCIENCE AND TECHNOLOGY
Academician Tan Sri Emeritus
Professor Datuk Dr
Augustine Ong Soon Hock

For outstanding contribution to the research and development of the chemistry and technology of palm oil and for his significant role in advocating and promoting the Malaysian palm oil industry to the world



OUTSTANDING SCHOLASTIC
ACHIEVEMENT
Tan Sri Professor
Dr Syed Muhammad Naquib al-Attas

For outstanding contribution to the scholarly research in the area of Islamisation of contemporary knowledge and of Muslim education



OUTSTANDING CONTRIBUTION
TO THE PEOPLE OF MALAYSIA
Dr Engkik Soepadmo

For outstanding contribution to the research and conservation of Malaysia's forest plant diversity

Merdeka Award Board of Trustees & Committee Members



PATRON

PRIME MINISTER OF MALAYSIA

Dato' Sri Mohd Najib bin Tun Abdul Razak

BOARD OF TRUSTEES

His Royal Highness Raja Dr Nazrin Shah Ibni

Sultan Azlan Muhibbuddin Shah *Chairman*

Tan Sri Dato' Shamsul Azhar Abbas

Mr J Hunter Farris

Mr Iain Lo

Dato' Henry Sackville Barlow

Professor Emeritus Datin Dr Norella Kong

SELECTION COMMITTEE

Tan Sri Abu Talib Othman

Raja Tan Sri Dato' Seri Arshad Raja Tun Uda

Tan Sri Dato' Cecil WM Abraham

Dato' Saw Choo Boon

NOMINATION COMMITTEES

Education & Community

Toh Puan Dato' Seri Hajjah Dr Aishah Ong

Dato' Faridah Merican

Miss Rikke Jarvad Netterstrom

Senator Datuk Paul Low Seng Kuan

Tan Sri Datuk Rafiah Salim

Environment

Professor Dr Andrew Alek Tuen

Miss Elizabeth Cardoso

Health, Science & Technology

Associate Professor Dr George Lee Eng Geap

Professor Datuk Dr Halimaton Hamdan

Professor Datuk Dr Mazlan Othman

Outstanding Scholastic Achievement

Professor Tan Sri Dato' Dzulkifli Abdul Razak

Professor Dr Harith Ahmad

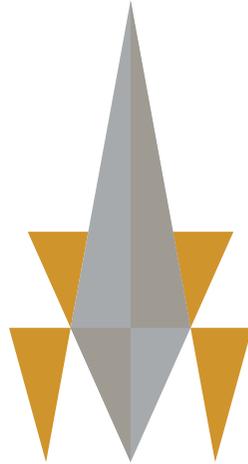
Professor Emeritus Dr Yong Hoi Sen

Outstanding Contribution to the People of Malaysia

Datuk Dr Paddy Bowie

Tunku Dato' Ya'acob Tunku Tan Sri Abdullah

The Logo and Trophy



M E R D E K A
A W A R D



Designed by Dato' Johan Ariff, the trophy is a three dimensional version of the Merdeka Award logo. It expresses convergence and ascension, the same qualities celebrated in the achievements of the Merdeka Awards winners. The trophy also represents environmental concerns in the form of a plant shoot *Rebung*, transparency, ethics, and the glorious five decades of Malaysian independence.

An Artistic Vision of Excellence



This Latiff Mohidin sculpture incorporates the kinetic element of a rotating ball symbolising freedom. The sculpture rests on a granite base denoting strength and fortitude. The piece also incorporates the traditional elements of *Sulur Bayur* underscoring heritage and *Pucuk Rebung* signifying excellence.



