

CURRICULUM VITAE

Professor Dr Shahrul Bahyah Kamaruzzaman

Department of Medicine, Faculty of Medicine, University Malaya, 50603, Kuala Lumpur Malaysia.

BIOGRAPHY

Professor Dr Shahrul Bahyah Kamaruzzaman is a Consultant Geriatrician and Head of the Geriatric Unit at the University of Malaya Medical Center. She returned to Malaysia in 2002 after her geriatric training in Cardiff, Wales, United Kingdom and served as Senior Lecturer in the country's first Geriatric unit. Dr Shahrul played a key role in the training and refining of the geriatric multidisciplinary team as well as the acute geriatric care services at UMMC. She embarked on her PhD in 2006 at the London School of Hygiene and Tropical Medicine and was awarded a PhD in Epidemiology and Population Health in July 2010. Her thesis was on the assessment of frailty in community dwelling older adults for which she developed and validated a weighted Frailty index in the British older population. Her clinical and research interest is in acute and rehabilitative care of the elderly as well as dementia and she is well published in these areas. Both her training in geriatrics and epidemiology has been useful in her research activities as a founder member of the Ageing and Age Associated Disorders Research Group in University Malaya as well as the Malaysian Society of Geriatric Medicine and is Vice President of the Gerontology Association of Malaysia. She is currently chair of the postgraduate National Curriculum writing team for Internal Medicine. All these various clinical and academic roles have helped cement her commitment to the development of clinical services, ageing research and medical education in Malaysia.

ACADEMIC QUALIFICATIONS

- **PhD** in Epidemiology and Population Health July 2010, (London School of Hygiene and Tropical Medicine), University of London UK
- **MRCP(UK)**(2000), Royal College of Physicians London, UK.
- **PG Dip Epidemiology**, 2008, University of London,UK.
- Diploma Geriatric Med,**(DGM)**2001, Royal College of Physicians London, UK.
- **MBBCh**,July 1997 University of Wales College of Medicine,Cardiff, Wales, UK.

PROFESSIONAL AFFILIATIONS

- Fellow of the Royal College of Physicians (**FRCP**) 2016, Royal College of Physicians London, UK.
- Malaysian Scientific Association 2016 (Member)
- Gerontological Association of Malaysia, Vice President, 2015, (National)
- Asian Working Group for Sarcopenia, Academic Advisory Panel, from 2013, (International)
- Malaysian Society for Geriatric Medicine, Member, Organising Committee, since 2012, (National)
- Alumni Association of the University of Malaya, Registered Member, 2011, (National)
- London School of Hygiene and Tropical Medicine, Graduate Member, 2008, (International)
- Alzheimer's Disease Foundation Malaysia (Member)

EDUCATIONAL/ACADEMIC DUTIES

Program Coordinator for the Masters of Internal Medicine Program, January 2014-2016,Department of Medicine, Faculty of Medicine, University of Malaya.

Chair for National Curriculum Writing group for Internal Medicine (National) 2015-current

AREAS OF RESEARCH

- The Malaysian Elders Longitudinal Research(MELoR), **Principal Investigator(PI)**, 2013-2016, High Impact Research (HIR) - Ministry of Education (HIR-MOE)
- Review on Ageing and the Elderly: What factors contribute to Healthy vs Pathological Ageing in Malaysia, **Co-Investigator**, 2015-2016, ILSI, National
- The relationship between lipodystrophy, insulin resistance, adiponectin levels and their association with subclinical atherosclerosis in aging HIV patients compared to the non HIV population., **Co-Researcher**, 21/01/2015, University Malaya Research Grant (UMRG) - AFR (Frontier Science), 11/02/2017

- Percutaneous Endoscopic Gastrostomy Versus Nasogastric Feeding In Dysphagic Older Hospitalized Patients (PeNOH), **Co-Researcher**, 18/04/2014, University Malaya Research Grant (UMRG) - HTM (Wellness), 25/06/2016
- Lower Urinary Tract Symptoms And Sexual Dysfunction Among Patients With Osteoarthritis, **Co-Researcher**, 05/09/2014, Grand Challenge - HTM (Wellness), 05/09/2016
- TUA- Neuroprotective model for healthy longevity among Malaysian elderly, **Co-Investigator**, 2013-2016, Long Term Research Grant Scheme (LRGS)
- TauRx Study, **Co-Investigator**, 2013-2016, Pharmaceutical study
- The Malaysian Falls Assessment and Intervention Trial (MyFAIT), **Co-Investigator**, 2012-2015, University Malaya Research Grant (UMRG), National

PUBLICATIONS IN PAST 5 YEARS

- Rajasuriar R1, Chong ML, Ahmad Bashah NS, Abdul Aziz SA, Mcstea M, Lee Ecy, Wong PL, Azwa I, Syed Omar SF, Lai PSM, Ponampalavanar S, Crowe SM, Lewin SR, Kamaruzzaman SB, Kamarulzaman A. Major health impact of accelerated aging in young HIV-infected individuals on antiretroviral therapy. *AIDS*. 2017 Jun 19;31(10):1393-1403. doi: 10.1097/QAD.0000000000001475.
- Hasni M, Sazereen D, Lim SM, Chin AV, Tan MP, Poi PJ, Kamaruzzaman SB, Majeed AB, Ramasamy K. Peripheral cytokines, C-X-C motif ligand10 and interleukin-13, are associated with Malaysian Alzheimer's disease. *Geriatrics & gerontology international*. 2017 May 1;17(5):839-46.
- Megan Mcstea, Kevin McGeechan, SB Kamaruzzaman, MP Tan. Defining Metabolic Syndrome and Factors Associated with Metabolic Syndrome in a Poly-pharmaceutical Population. *Postgraduate Medicine* 128(8) August 2016
DOI: 10.1080/00325481.2016.1229103
- Elsa Dent, Christopher Lien, Wee Shiong Lim, Wei Chin Wong, Chek Hooi Wong, Tze Pin Ng, Jean Woo, Birong Dong, Shelley DeLa Vega, PJH Poi, SB Kamaruzzaman et al. The Asia-Pacific Clinical Practice Guidelines for the Management of Frailty. July 2017 DOI: 10.1016/j.jamda.2017.04.018
- Che Nor Adlia Enche Ady, SM Lim, LK The, MZ Salleh, AV Chin, MP Tan, PJH Poi, SB Kamaruzzaman, Abu Bakar Abdul Majeed, Kalavathy Ramasamy. Metabolomic-guided discovery of Alzheimer's disease biomarkers from body fluid. *Journal of Neuroscience Research* 104 March 2017 .DOI: 10.1002/jnr.24048
- Li Min Lim, Megan McStea, Wen Wei Chung, Nuruljannah Nor Azmi, Siti Azdiah Abdul Aziz, Syireen Alwi, Adeeba Kamarulzaman, Shahrul Bahyah Kamaruzzaman, Siew Siang Chua, Reena Rajasuriar. Prevalence, risk factors and health outcomes associated with polypharmacy among urban community-dwelling older adults in multi-ethnic Malaysia. Published: March 8, 2017
<https://doi.org/10.1371/journal.pone.0173466>
- Sivaraj Naidu, Sasheela Ponnampalavanar, SB Kamaruzzaman, A Kamarulzaman. Prevalence of Metabolic Syndrome Among People Living with HIV in Developing Countries: A Systematic Review. *AIDS PATIENT CARE and STDs* 31(1):1-13 January 2017
- Sharif Abdullah, S.S, Chong, M.C., Surindar Kaur, S.S., **Kamaruzzaman, S.B.**, & Ng, K.H. 2016. The effect of Chlorhexidine in reducing oral colonization in geriatric patients: A Randomized Controlled Trial. *Singapore Med J* 57(5):262-266 (*ISI-Indexed*)
- Tan MP, **Kamaruzzaman S**, Chin AV, Idzwan Z, Poi PJH. Ten Year Mortality Among Older Fallers Attending the Accident and Emergency Department. **Geriatrics and Gerontology International** Volume: 16 Issue: 1 Pages: 111-117 Published: JAN 2016 DOI: 10.1111/ggi.12446
- Jeyanthini Sathasivam, **Shahrul Bahyah Kamaruzzaman**, Fariza Hairi, Ng Chiu Wan, Karunthan Chinna. Frail Elders in an Urban District Setting in Malaysia: Multidimensional Frailty and Its Correlates. 46th APACPH Conference Supplement, **Asia Pacific Journal of Public Health**. Page 1- 10, 2015. DOI: 10.1177/101053951558333 (*ISI-Cited Publication*)
- Zia, Anam; **Kamaruzzaman, S.**; Myint, Phyoo Kyaw; et al. Anticholinergic burden is associated with recurrent and injurious falls in older individuals. *Maturitas* Volume: 84 Pages: 32-37 DOI: 10.1016/j.maturitas.2015.10.009. Published: FEB 2016
- Mohamad Shafiq Azanan, Noor Kamila Abdullah, Ling Ling Chua, Su Han Lum, Sayyidatul Syahirah Abdul Ghafar, Adeeba Kamarulzaman, **Shahrul Kamaruzzaman**, Sharon R. Lewin, Yin Ling Woo, Hany Ariffin, Reena Rajasuriar. Immunity in young adult survivors of childhood leukemia is similar to the elderly rather than age-matched controls: Role of cytomegalovirus. **Eur. J. Immunol.** 2016. 00: 1-12 DOI: 10.1002/eji.201646356

- Sharifah Shafinaz Binti Sharif-Abdullah, Mei Chan Chong, Surat Singh Surindar-Kaur, **Shahrul Bahyah Kamaruzzaman**, Kwan Hoong Ng. The effect of chlorhexidine in reducing oral colonisation in geriatric patients: a randomised controlled trial. **Singapore Med J** 2016; 57(5): 262-266 doi: 10.11622/smedj.2016091
- Saedon, Nor Izzati; Zainal-Abidin, Imran; Chee, Kok Han; **Shahrul K. Kamaruzzaman**, Ai-Vyrn Chin, Philip J. H. Poi, Maw Pin Tan. Postural blood pressure electrocardiographic changes are associated with falls in older people. **Clinical Autonomic Research** Volume: 26 Issue: 1 Pages: 41-48 Published: FEB 2016 DOI: 10.1007/s10286-015-0327-5
- Tan, Maw Pin; **Kamaruzzaman, Shahrul Bahyah**; Zakaria, Mohd Idzwan; et al. Ten-year mortality in older patients attending the emergency department after a fall. **Geriatrics & Gerontology International** Volume: 16 Issue: 1 Pages: 111-117 Published: JAN 2016 DOI: 10.1111/ggi.12446
- Zia, Anam; **Kamaruzzaman, Shahrul Bahyah**; Tan, Maw Pin. Blood pressure lowering therapy in older people: Does it really cause postural hypotension or falls? **Postgraduate Medicine** Volume: 127 Issue: 2 Pages: 186-193 DOI:10.1080/00325481.2015.996505
- Sumaiyah Mat; Maw Pin Tan; **Shahrul Bahyah Kamaruzzaman**; Chin Teck Ng. Physical therapies for improving balance and reducing falls risk in osteoarthritis of the knee: a systematic review. *Age and Ageing* 2014; doi: 10.1093/ageing/afu112.
- Mohd Amin Mohd Mokhtar, Tan Maw Pin, Mohd Idzwan Zakaria, Noran Naqiah Hairi, **Shahrul Bahiyah Kamaruzzaman**, Chin Ai Vyrn, Philip Poi Jun Hua. Utilization of the emergency department by older residents in Kuala Lumpur, Malaysia doi: 10.1111/ggi.12369
- Sylvia SC Ngu, Maw Pin Tan, Pathmawathi Subramanian, Rasnah Abdul Rahman, **Shahrul Kamaruzzaman**, Ai-Vyrn Chin, Kit Mun Tan, Philip JH Poi. Pain Assessment Using Self-reported, Nurse-reported, and Observational Pain Assessment Tools among Older Individuals with Cognitive Impairment. **Pain Management Nursing**, 2015 16(4):595-601. (*ISI-Cited Publication*)
- The Evaluation of New Index for Blood Pressure Variability Using Posture Change Among Older Fallers. CH Goh, SC Ng, SB Kamaruzzaman, AV Chin, PJH Poi - **Journal of Hypertension**, 2015,33:e3 doi: 10.1097/01.hjh.0000469728.67622.d6 (*ISI-Cited Publication*)
- Anam Zia, **S. B. Kamaruzzaman**, Phyo Kyaw Myint, M.P. Tan. The association of antihypertensives with postural blood pressure and falls among seniors residing in the community: a case control study. **European Journal of Clinical Investigation** 2015. DOI: 10.1111/eci.12508 (*ISI-Cited Publication*)
- Nordin N, Poi PJH, Kamaruzzaman S, Chin AV, Tan MP. A Descriptive Study of Nasogastric Tube Feeding Among Geriatric Inpatients in Malaysia: Utilization, Complications, and Caregiver Opinions. **Journal of Nutrition in Gerontology and Geriatrics**, 34:1, 34-49, DOI: 10.1080/21551197.2014.998326
- Lam NW, Goh HT, **Kamaruzzaman SB**, Chin AV, Poi PJH, Tan MP. Normative data for Hand and Pinch Grip Strength stratified by age and gender for a Multiethnic Asian population. **Singapore Med J** 2015; 1-21; <http://dx.doi.org/10.11622/smedj.2015164>
- Anam Zia, **Shahrul Bahyah Kamaruzzaman**, MP Tan. The Consumption of Two or More Fall Risk Increasing Drugs rather Than Polypharmacy is Associated with Falls. **Geriatrics and Gerontology International** December 2015 DOI: 10.1111/ggi.12741
- Mohammad Ashfak Habib, Fatimah Ibrahim, Mas S. Mohktar, **Shahrul Bahyah Kamaruzzaman**, Kheng Seang Lim. Ictal EEG Source Imaging for Presurgical Evaluation of Refractory Focal Epilepsy. **World Neurosurgery**, DOI: 10.1016/j.wneu.2015.10.096
- Tey Nai Peng, Saedah Siraj, Glaret Shirley Sinnappan, Tan Maw Pin, Chin Ai Vyrn, , Andre Mathias Muller, **Shahrul Bahyah Kamaruzzaman**. Aging in Multiethnic Malaysia. Spotlight **The Gerontologist** ISDN: 1758-5341
- S Mat, MP Tan, **SB Kamaruzzaman**, CT Ng. Physical therapies for improving balance and reducing falls risk in osteoarthritis of the knee: a systematic review. **Age and Ageing** 2014; 0: 19 doi: 10.1093/ageing/afu112
- Liang-Kung Chen, Li-Kuo Liu , Jean Woo MD b, Prasert Assantachai MD, PhD c, Tung-Wai Auyeung, Kamaruzzaman Shahrul Bahyah et al, Sarcopenia in Asia: Consensus Report of the Asian Working Group for Sarcopenia. **JAMDA** 15 (2014) 95-101
- Khor, H.M., Juan Tan, Nor Izzati Saedon, **Shahrul B. Kamaruzzaman**, Ai Vyrn Chin, Philip J.H. Poi, Maw Pin Tan. Determinants of mortality among older adults with pressure ulcers. **Arch. Gerontol. Geriatr.** (2014), Volume 59(3):536-41
- Mohammad Ashfak Habib, Mas S. Mohktar, **Shahrul Bahyah Kamaruzzaman**, Kheng Seang Lim, Tan Maw Pin, Fatimah Ibrahim. Smartphone-Based Solutions for Fall Detection and Prevention: Challenges and Open Issues: **Sensors** 2014, 14, 7181-7208; doi:10.3390/s140407181
- Zia A, Kamaruzzaman SB, Tan MP. Polypharmacy and falls in older people: balancing evidence-based

- medicine against falls risk. Postgraduate medicine 2014; DOI: 10.1080/00325481.2014.996112
- Mohd Amin Mohd Mokhtar, Tan Maw Pin, Mohd Idzwan Zakaria, 3 Noran Naqiah Hairi, 4 Shahrul Bahiyah Kamaruzzaman et al. Utilization of the emergency department by older residents in Kuala Lumpur, Malaysia doi: 10.1111/ggi.12369
 - Mohd Nazif Darawi, Chin Ai-Vyryn, Kalavathy Ramasamy, Philip Poi Hua, Tan Maw Pin, **Shahrul Bahyah Kamaruzzaman**, Abu Bakar Majeed. Allele-specific polymerase chain reaction for the detection of Alzheimer's disease-related single nucleotide polymorphisms. **BMC Medical Genetics** 2013, 14:27
 - **Shahrul Kamaruzzaman**, Hilary Watt, Claire Carson, Shah Ebrahim. 2009. The association between orthostatic hypotension and medication use in the British Women's Heart and Health Study. **Age & Ageing** 2010. 39:51- 56, doi:10.1093/ageing/afp192
 - **Shahrul Kamaruzzaman**, George B Ploubidis, Astrid Fletcher, Shah Ebrahim. A reliable measure of frailty for a community dwelling older population. *Health and Quality of Life Outcomes* 2010, 8:123 doi:10.1186/1477-7525-8-123

Chapters in book

- Sleep Disorders in Elderly. Handbook of Geriatric Medicine. Unit of Geriatric Medicine Publication, Hospital Kuala Lumpur, Ministry of Health Malaysia. Chapter 2:8. ISBN 978-983-43917-1-3
- 'Frailty in older adults'. Handbook of Geriatric Medicine. Unit of Geriatric Medicine Publication, Hospital Kuala Lumpur, Ministry of Health Malaysia. Chapter 1:4. ISBN 978-983-43917-1-3

Expert Linkages

- LSHTM Alumni, London School of Hygiene and Tropical Medicine, 2015, 12, (International)
- Member of expert panel for the Asian Working Group for Sarcopenia, Asian Working Group for Sarcopenia (AWGS), 2015, 36, (International)