

SHEILA NATHAN – LIST OF PUBLICATIONS:

BOOKS

1. Sylvia Chieng and **Sheila Nathan**. 2021 *Burkholderia pseudomallei*: Jangkitan dan Pengesanan. ISBN 978-967-251-309-4. Penerbit Universiti Kebangsaan Malaysia

BOOK CHAPTERS

1. **Sheila Nathan**. 2005. Recombinant Antibodies: Biology and Application. In: Selected Issues in Biotechnology. pp. 16-29. ISBN No. 983-2975-36-0
2. Noor Izaanin, Lee Yook Heng and **Sheila Nathan**. 2009. Recent Progress in Chemical Sensor and Biosensor Research Series II: 37-44. UKM: Ampang Press
3. Wong P S, **Sheila Nathan** and Lee Yook Heng. 2009. Recent Progress in Chemical Sensor and Biosensor Research Series II: 97-102. UKM: Ampang Press
4. Ifor Beacham, Yuka Hara, **Sheila Nathan** and Ian Peak. 2012. Virulence determinants in *Burkholderia pseudomallei*: Opportunistic or accidental pathogen? In: Melioidosis – A Century of Observation and Research. pp. 87-98 (ed. N. Keethesan, Elsevier) ISBN No. 978-0-444-53479-8.
5. Yuka Hara and **Sheila Nathan**. 2015. Outer membrane proteins and potential candidate vaccine targets. In: Post-genomic Approaches in Drug and Vaccine Development pp. 277-322. (eds. K. Sakharar, M. Sakharar and R. Chandra, River Publishers) ISBN No. 978-87-93102-84-2.
6. **Sheila Nathan**, Sylvia Chieng, Paul Vijay Kingsley, Anand Mohan, Yuwana Podin, Mong-How Ooi, Vanitha Mariappan, Kumutha Malar Vellasamy, Jamuna Vadivelu, Sylvia Daim and Soon-Hin How. 2019. Melioidosis in Malaysia: Incidence, clinical challenges, and advances in understanding pathogenesis. In: Global Burden and Challenges of Melioidosis pp. 109-127. (eds. D. Limmathurotsakul and DAB Dance, MDPI Books) ISBN No. 978-3-03897-742-1.
7. **Sheila Nathan**. 2022. Harnessing the power of phage display to engineer antibodies: A Californian experience. In: Bridging Cultures: Reflections of UKM Fulbright Scholars Experiences. Pp. xxx (eds. K.A. Mastor and K.A. Talib, UKM Press) ISBN 978-967-251-815-0

PEER-REVIEWED JOURNALS

DNA Repair & Cancer

1. **Sheila Nathan**. 1995. DNA repair disorders: A review. *Sains Malaysiana*. 24(3): 1-18.
2. Cheong S.C., K. Sidik, S. Hussein and **Sheila Nathan**. 1999. Analysis of p53 mutations in Malaysian skin disorders. *Mal. J. Dermatol.* 12:13-20.
3. **Sheila Nathan**, A. van Hoffen, L H.F. Mullenders and L.V. Mayne. 1999. Gene-specific repair of 6-4 photoproducts in trichothiodystrophy cells. *J. Biochem. & Mol. Biol.* 32(6): 554-560.
4. **Sheila Nathan**, A. van Hoffen, L.H. Mullenders and L. Mayne. 2000. Gene-specific repair of pyrimidine dimers in trichothiodystrophy cells. *Sains Malaysiana*. 29:19-31.
5. A. S.C. Chin, S.C. Cheong, K. Sidik, S. Hussein and **Sheila Nathan**. 2001. Multiplex PCR for the detection of mutations in the *p53* and *hprt* genes. *Mal. J. Biochem. & Mol. Biol.* 6:25-29.
6. S. C. Cheong and **Sheila Nathan**. 2003. p53 – Guardian of the genome. *Mal. J. Biochem. & Mol. Biol.* 8:1-11.
7. Kin Kit Sam, Chai Phei Gan, Pei San Yee, Chan Eng Chong, Kue Peng Lim, Lee Peng Karen Ng, Wei Sern Chang, **Sheila Nathan**, Zainal Ariff Abdul Rahman, Siti Mazlipah Ismail & Sok Ching Cheong. 2012. Novel MDM2 splice variants identified from oral squamous cell carcinoma. *Oral Oncology* 48:1128-1135.
8. Then S-M., N-F Jusoh R. Harun, **Sheila Nathan**, N.J. Szewczyk, L. Stodieck and R. Jamal.

2014. Multi-generational culture of *C. elegans* on a long-term space flight revealed changes in expression of genes involved in longevity, DNA repair and locomotion. *Asia Pac. J. Mol. Med.* 4(1): 1-11.
9. Hazwani Mohd Yusof, Sharaniza Ab-Rahim, Wan Zurinah Wan Ngah, **Sheila Nathan**, Rahman A Jamal A and Musalmah Mazlan. 2019. Metabolites profile of colorectal cancer cells at different stages. *International Journal of Applied Pharmaceutics*. 11(5): 1-5.
 10. Nurul Azmir Amir Hashim, Sharaniza Ab-Rahim, Wan Zurinah Wan Ngah, **Sheila Nathan**, Nurul Syakima Ab Mutalib, Ismail Sagap, A. Rahman A. Jamal, Musalmah Mazlan. 2021. Global metabolomics profiling of colorectal cancer in Malaysian patients. *BioImpacts*, 11(1): 33-43.
 11. Hazwani Mohd Yusoff, Sharaniza Ab-Rahim, Wan Zurinah Wan Ngah, **Sheila Nathan**, A. Rahman A. Jamal and Musalmah Mazlan. 2021. Metabolomic characterization of colorectal cancer cell lines highlighting stage-specific alterations during cancer progression. *BioImpacts* 11(2): 147-156.
 12. Le Jie Lee, Norfarazieda Hassan, Siti Zuleha Idris, Suresh Kumar Subbiah, Heng Fong Seow, Norhafizah Mohtaruddin, Kian Meng Chang, Raudhawati Osman, Hishamshah Mohd Ibrahim, **Sheila Nathan**, Maha Abdullah. 2022. Differential regulation of NK cell receptors in Acute Lymphoblastic Leukemia. *Journal of Immunology Research* 2022: 1-13.

Structural Biology

1. M-P Nyon, David W. Rice, John M. Berrisford, Hua-Zhang Huang, Arthur J.G. Moir, C. Jeremy Craven, **Sheila Nathan**, Nor Muhammad Mahadi and Farah Diba Abu Bakar. 2008. Crystallization and preliminary X-ray analysis of recombinant *Glomerella cingulata* cutinase. *Acta Crystallogr Sect F Struct Biol Cryst Commun.* 1; 64(Pt 6):504-8.
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- Ng, C.L. 2014. Crystallization and preliminary crystallographic studies of the hypothetical protein BPSL1038 from *Burkholderia pseudomallei*. *Acta Cryst.* F70: 1697- 1700.
9. Rao K.N., Lakshmiranarasimhan A., Joseph S., Lekshi S.U., M-S. Lau, Takhti M., Srenivas K., **Sheila Nathan**, Yusof R., Abd. Rahman N., Ramachandra M., Anthony T and Subramanya H. 2015. AFN-1252 is a potent inhibitor of Enoyl-ACP reductase from *Burkholderia pseudomallei* – Crystal structure, mode of action and biological activity. *Protein Sci.* 24(5): 832-40.
 10. Nur Zazarina Ramly, Samuel R. Dix, Sergey N. Ruzhenikov, Svetlana E. Sedelnikova, Patrick J. Baker, Yock-Ping Chow, Fiona M. Tomley, Damer P. Blake, Kiew-Lian Wan, **Sheila Nathan** and David W. Rice. 2021. The structure of a major surface antigen SAG19 from *Eimeria tenella* unifies the *Eimeria* SAG family. *Communications Biology.* 4:376-384.
 11. George W. Mobbs, Adli A. Aziz, Samuel R. Dix, G. M. Blackburn, Sveta E. Sedelnikova, Thomas C. Minshull, Mark J. Dickman, Patrick J. Baker, **Sheila Nathan**, Mohd Firdaus-Raih, David W. Rice. 2022. Molecular basis of specificity and deamidation of eIF4A by *Burkholderia* Lethal Factor 1. *Communications Biology* 5:272

Phage Display: Monoclonal Antibodies and Peptides

1. Chiu H.F., P.M. Kok, R. Mohamed, Noor Embi and **Sheila Nathan**. 1999. Purification and characterisation of monoclonal antibodies towards exotoxin of *Burkholderia pseudomallei*. *Mal. J. Biochem. & Mol. Biol.* 4:20-24.
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- characterization. *J. Biochem. & Mol. Biol.* 37: 556-564.
15. S.W. Chan and **Sheila Nathan**. 2005. Epitope mapping of *Burkholderia pseudomallei* serine metalloprotease: Identification of serine epitope mimics. *FEMS Microbiol. & Immunol.* 43: 37-44.
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 22. E. Sunderasan, Rusni A Kadir, Valerie P-Renaud, HY Yeang and **Sheila Nathan**. 2009. Single-chain variable fragments antibody specific to *Corynespora cassicola* toxin, cassiicolin, reduces necrotic lesion formation in *Hevea brasiliensis*. *J. Gen. Plant Pathol.* 75:19-26.

Molecular Microbiology

Burkholderia pseudomallei

1. R. Mohamed, **Sheila Nathan**, G. Ismail and Noor Embi. 1989. Inhibition of protein synthesis in macrophage cells by exotoxin of *Pseudomonas pseudomallei*. *Microbiol. Immunol.* 33:518-533. 1.304
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22. Song-Hua Lee and **Sheila Nathan**. 2013. *Burkholderia pseudomallei*: An update on disease, virulence and host interaction. *Malays. Appl. Biol.* 42(1):1 - 14. ([Cover Art](#))
23. Song-Hua Lee, Rui-Rui Wong, Chui-Yoke Chin, Tian-Yeh Lim, Su-Anne Eng, Cin Kong, Nur Afifah Ijap, Ming-Seong Lau, Mei-Perng Lim, Yunn-Hwen Gan, Fang-Lian He, Man-Wah Tan and **Sheila Nathan**. 2013. *Burkholderia pseudomallei* suppresses *Caenorhabditis elegans* immunity by specific degradation of a GATA transcription factor. *Proc. Natl. Acad. Sci. USA* 110(37):15067 – 15072.
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30. Wong Y-C, Abd El Ghany M, Naeem R, Lee K-W, Tan Y-C, Pain A. and **Sheila Nathan** 2016. Candidate essential genes in *Burkholderia cenocepacia* J2315 identified by genome-wide TraDIS. *Front. Microbiol.* 7:1288. doi: 10.3389/fmicb.2016.01288
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38. Rui-Rui Wong, Khairon-Muslihin Baharom, Ahmad-Kamal Ghazali, Abdul Karim Russ Hassan and **Sheila Nathan**. 2021. Phenotype and virulence assessment of a *Burkholderia pseudomallei* soil isolate from Malaysia. *Sains Malaysiana.* 50(5): 1233-1241.
39. Vanitha Mariappan, Kumutha Malar Vellasamy, Rohan Raj Anpalagar, Yue-Min Lim, Nurhamimah Zainal Abidin, Sreeramanan Subramaniam and **Sheila Nathan**. 2022. One Health surveillance approaches for melioidosis and glanders: the Malaysian perspective. *Front. Vet. Science* 9:1056723.
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42. Pravin Kumran Nyanasegran, **Sheila Nathan**, Mohd Firdaus Raih, Nor Azlan Nor Muhammad, Chyan Leong Ng. 2023. Biofilm signalling, composition and regulation in *Burkholderia pseudomallei*. *J. Microbiol Biotechnol.* 33(1): 15-27.
43. Ahmad-Kamal Ghazali, Mohd Firdaus-Raih, Asqwin Uthaya Kumar, Wei-Kang Lee, Chee-Choong Hoh and **Sheila Nathan**. Transitioning from soil to host: Comparative transcriptome analysis reveals the *Burkholderia pseudomallei* response to different niches. *Microbiology Spectrum. In press.*
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Miscellaneous Pathogens

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