

## PROFILE

1	Name	Gurmeet Kaur Surindar Singh
2	Address	Level 7 FF1 Building Faculty of Pharmacy UiTM Puncak Alam Campus 42300 Bandar Puncak Alam, Selangor, Malaysia Email Address: <a href="mailto:gurmeet9952@uitm.edu.my">gurmeet9952@uitm.edu.my</a> Phone Number: +603-3258 4751 Fax: +603-3258 4602
3	Research Group	Brain Degeneration & Therapeutics (Head)
4	Google Scholar Scopus UiTM Expert	<a href="https://scholar.google.com.au/citations?hl=en&amp;user=JEoDbTYAAAAJ&amp;authuser=1#">https://scholar.google.com.au/citations?hl=en&amp;user=JEoDbTYAAAAJ&amp;authuser=1#</a> <a href="https://www.scopus.com/authid/detail.uri?authorId=56459363200">https://www.scopus.com/authid/detail.uri?authorId=56459363200</a> <a href="https://expert.uitm.edu.my/profile.php?id=+NopMU3QH/ZSov1Yre7RF77V/JBVumXe9+BJHuvvBA=">https://expert.uitm.edu.my/profile.php?id=+NopMU3QH/ZSov1Yre7RF77V/JBVumXe9+BJHuvvBA=</a>
5	Faculty Positions	<ol style="list-style-type: none"> <li>1. Deputy Dean (Research and Innovation), Faculty of Pharmacy, UiTM (2020_2022).</li> <li>2. Head of Department (Pharmaceutical Life Sciences, Faculty of Pharmacy, UiTM 2018_2020)</li> <li>3. Head of Brain Degeneration &amp; Therapeutics, Research Group (RG), UiTM</li> <li>4. Member for the Committee on Animal Research and Ethics UiTM (UiTM CARE)</li> <li>5. Committee member Students Continuous Professional Development (CPD), Division, Faculty of Pharmacy, UiTM</li> <li>6. Committee member Technical Team LAFAM (Laboratory Animal Facility and Management), Faculty of Pharmacy, UiTM</li> <li>7. Editor in Chief International Journal of Pharmaceuticals, Nutraceuticals and Cosmetic Science, IJPNaCS (2018-present)</li> </ol>
6	Education	Phd (Medicine) University of Sydney, Australia, 2015 MSc (Physiology) University Malaya, Malaysia, 2008 BSc. (Hons.) (Biomedical Technology), University Malaya, Malaysia, 2003
7	Academic Responsibilities	<ol style="list-style-type: none"> <li>1. Human Anatomy And Physiology (PHC 411)</li> <li>2. Animal Physiology (BIO 560)</li> <li>3. Principals of Pathology (PHC 515)</li> <li>4. Traditional and Complementary Medicine (PHC 661)</li> <li>5. Research Proposal (PHC 610) &amp; 2 (PHC 632)</li> <li>6. Pharmaceutical Biochemistry (PHC 462)</li> <li>7. Pharmaceutical Immunology (PHC 460)</li> </ol>
8	Research Interests/ Projects	<ul style="list-style-type: none"> <li>• Investigating the role of neurosteroid metabolism in Alzheimer's disease</li> <li>• Exploring the dysregulation of phase II enzymes in Alzheimer's disease</li> <li>• Developing and validating analytical methods using LC-MS/MS for steroid analysis</li> <li>• Studying neurophysiology and neuroendocrinology for the management of neurodegenerative diseases</li> <li>• Investigating the potential aphrodisiac properties of Tongkat Ali</li> <li>• Exploring the neuroprotective effects of astaxanthin nanoemulsion in Alzheimer's disease</li> </ul>

		<ul style="list-style-type: none"> <li>Investigating the neuroprotective role of synthetic progesterone in neurodegenerative diseases</li> </ul>
9	Publications	<p><b>Journal Publications</b></p> <ul style="list-style-type: none"> <li>Mutalip, S. S. M., <b>Surindar Singh, G. K.</b>, Mohd Shah, A., Mohamad, M., Mani, V., &amp; Hussin, S. N. (2013) Histological changes in testes of rats treated with testosterone, nandrolone, and stanozolol. <i>Iranian Journal of Reproductive Medicine</i>, 11(8), 653-658.</li> <li><b>Singh GKS</b>, Jimenez M, Newman R, Handelsman DJ 2014 Immunoreactive LH in long-term frozen human urine samples. <i>Drug Test. Anal.</i> 6: 336-341</li> <li><b>Singh GKS</b>, Turner L, Desai R, Jimenez M, Handelsman DJ 2014 Pharmacokinetic-pharmacodynamic study of subcutaneous injection of depot nandrolone decanoate using dried blood spots sampling coupled with ultrahigh pressure liquid chromatography tandem mass spectrometry assays. <i>J. Clin. Endocrinol. Metab.</i> 99:2592-2598</li> <li><b>Gurmeet, K.</b>, Rosnah, I., Normadiah, M., Das, S., &amp; Mustafa, A. 2014. Detrimental effects of bisphenol A on development and functions of the male reproductive system in experimental rats. <i>EXCLI Journal</i> 13:151-160</li> <li><b>Singh GKS</b>, Balzer, BWS, Desai R, Jimenez M, Steinbeck KS, Handelsman DJ 2015 Requirement for specific gravity and creatinine adjustments for urinary steroids and luteinizing hormone concentrations in adolescents. <i>Ann Clin Biochem</i> 52: 665 – 671</li> <li>Handelsman DJ, Jimenez M, <b>Singh GKS</b>, Spaliviero J, Desai R, Walters KA 2015 Measurement of testosterone by immunoassays and mass spectrometry in mouse serum, testicular and ovarian extracts. <i>Endocrinology</i> 156: 400-405</li> <li><b>Singh, G. K.</b>, Balzer, B. W., Kelly, P. J., Paxton, K., Hawke, C. I., Handelsman, D. J., &amp; Steinbeck, K. S. (2015). Urinary Sex Steroids and Anthropometric Markers of Puberty-A Novel Approach to Characterising Within-Person Changes of Puberty Hormones. <i>PLoS ONE</i>, 10(11).</li> <li><b>Gurmeet Kaur Surindar Singh</b>, Nurul Aida Ashyqin Zulkefli, Muhammad Anwar Ismail, Meor Mohd Redzuan Meor Mohd Affandi (2017). Tissue Distribution of Astaxanthin Formulation in Rats. <i>Current Nutrition &amp; Food Science</i> (Vol 13). Scopus Indexed Journal.</li> <li><b>Gurmeet Kaur Surindar Singh</b>, Muhammad Fiqri Zolkurnian, Umair Alhadi Mohd Sahri, Muhammad Samsusah, Nur Adilah Abdul Rahman, Hannis Fadzillah Mohsin and Mashani Mohamad (2017). Regulation of androgens and steroidogenic enzymes gene expression in Sprague-Dawley rats treated with <i>Eurycoma longifolia</i> extract. <i>Thai Journal of Pharmaceutical Sciences.</i> (Vol 41)145-148. Scopus Indexed Journal.</li> <li>Mashani Mohamad, Muhammad Fiqri Zolkurnian, Umair Alhadi Mohd Sahri, Muhammad Samsusah, Nur Adilah Abdul Rahman, Hannis Fadzillah Mohsin and <b>Gurmeet Kaur Surindar Singh</b> (2017). Exploring the Aphrodisiac Potential of Tongkat Ali Hitam (<i>Polyalthia bullata</i>) In Male Sprague-Dawley Rats. <i>Thai Journal of Pharmaceutical Sciences.</i> (Vol 41)137-140. Scopus Indexed Journal.</li> <li>Mazzura Wan Chik, Nurul Aqmar Mohd Nor Hazalin, <b>Gurmeet Kaur Surindar Singh</b> (2017). Comparative Behavioural Study of Unilateral and Bilateral Intrahippocampal Injection of Streptozotocin for Alzheimer's Disease Rat Model. <i>Thai Journal of Pharmaceutical Sciences.</i> (Vol 41)213-216. Scopus Indexed Journal.</li> <li><b>Gurmeet Kaur Surindar Singh</b>, Khuriah Abdul Hamid, Muhammad Anwar Ismail, Yang Mahirah Abdul Ghani, Meor Mohd Redzuan Meor Mohd Affandi (2017). Intestinal Absorption of Astaxanthin Emulsion Formulations in Rats. <i>Thai Journal of Pharmaceutical Sciences.</i> (Vol 41)141-144. Scopus Indexed Journal.</li> <li>Ahmad Muner Md Daud, <b>Gurmeet Kaur Surindar Singh</b>, Vellayan Subramaniam. Review of Ivermectin Treatment on Exotic Animals (2017). <i>Thai Journal of Pharmaceutical Sciences.</i> (Vol 41)149-152. Scopus Indexed Journal.</li> <li>Mashani Mohamad, Hannis Fadzillah Mohsin, <b>Gurmeet Kaur Surindar Singh</b> (2017). A study on the effects of <i>Eurycoma longifolia</i> and <i>Polyalthia bullata</i> on reproductive organs and androgens of male Sprague-Dawley rats. <i>Journal of Engineering and Applied Sciences.</i> (Vol 12. Issue 25) 6694-6999. Scopus Indexed Journal.</li> </ul>

	<ul style="list-style-type: none"> <li>• <b>Gurmeet Kaur Surindar Singh</b>, KA Ku Azman, MA Abdul Hadi, Meor Mohd Redzuan Meor Mohd Affandi (2018). Scheduled and Standardised Training Improved Employees' Knowledge on Good Manufacturing Practices (GMP). International Journal of Pharmacy and Pharmaceutical Sciences. (Vol 10) 185-190.</li> <li>• Mazzura Wan Chik, Nurul Aqmar Mohamad Nor Hazalin, <b>Gurmeet Kaur Surindar Singh</b> (2018). Chronic intrahippocampal administration of streptozotocin targeting insulin receptors induced memory loss in rats: A dose comparison study. Cognition, Brain, Behavior: An Interdisciplinary Journal. (Vol 22; Issue 1) 13-29. Scopus Indexed Journal.</li> <li>• Siti Syairah Mohd Mutalip, Aishah Mohd Shah, Mashani Mohamad, Vasudevan Mani, Siti Nooraishah Hussin, <b>Gurmeet Kaur Surindar Singh</b> (2019). Pubertal anabolic androgenic steroid exposure in male rats affects levels of gonadal steroids, mating frequency, and pregnancy outcome. Journal of Basic and Clinical Physiology and Pharmacology. Vol 30(1) 29-36. Scopus Indexed Journal.</li> <li>• Leo Turner, Lam P. Ly, Reena Desai, <b>Gurmeet Kaur Surindar Singh</b>, Timothy D. Handelsman, Sasha Savkovic, Carolyn Fennell, Veena Jayadev, Ann Conway, David J Handelsman, 2019. Pharmacokinetics And Acceptability of Subcutaneous Injection Of Testosterone Undecanoate. Journal of the Endocrine Society 3(8),1531-1540.</li> <li>• Azman, K.A.K., Seong, F.C., <b>Singh, G.K.S.</b>, Affandi, M.M.R.M.M. Physicochemical Characterization of Astaxanthin-loaded Plga Formulation Via Nanoprecipitation Technique. Journal of Applied Pharmaceutical Science, 2021, 11(6), pp. 056–061.</li> <li>• Mazzura Wan Chik, Nurul Aqmar Mohd Nor Hazalin, <b>Gurmeet Kaur Surindar Singh</b>. Regulation of Phase I and Phase II Neurosteroid Enzymes in the Hippocampus of an Alzheimer's Disease Rat Model: A Focus on Sulphotransferases and UDP-Glucuronosyltransferases. Steroids 2022 Apr 8;109035. doi: 10.1016/j.steroids.2022.109035.</li> <li>• Chik MW, Meor Mohd Affandi MMR, <b>Singh GKS</b>. Detection of astaxanthin at different regions of the brains in rats treated with astaxanthin nanoemulsion. Journal of Pharmacy and Bioallied Sciences. 2022, 14 (1), 25-30.</li> <li>• Mazzura Wan Chik, Nurul Aqmar Mohd Nor Hazalin, <b>Gurmeet Kaur Surindar Singh</b>. Streptozotocin_mechanism and its role in rodent models for Alzheimer's disease. Toxin reviews. 2023. DOI: 10.1080/15569543.2022.2150646.</li> <li>• Othman, Nur Faeqah Furairah, <b>Gurmeet Kaur Surindar Singh</b>, Nurul Aqmar Mohamad Nor Hazalin. Roles of Nutraceuticals in Regulating Neurotransmitters in Dementia. 2023, 11(2), 79-89. DOI: 10.13189/app.2023.110201</li> <li>• Ghani, Nur Farhani Mohd, <b>Gurmeet Kaur Surindar Singh</b>, Nurul Aqmar Mohamad Nor Hazalin. Neuropathology of Streptozotocin-Induced Rodent Models of Alzheimer's Disease: A Review on Behavioral and Histological Evidence. Malaysian Journal of Biochemistry and Molecular Biology 2023, 26(1),66-76.</li> </ul> <p><i>Abstract presented at conferences</i></p> <ul style="list-style-type: none"> <li>• <b>Singh GKS</b>, Newman R, Desai R, Jimenez M, He JX, Simanainen U, Steinbeck K, Handelsman DJ Validation and application of an ultra-sensitive liquid chromatography (LC)-tandem mass spectrometry (MS) assay to measure androgens and estrogen in human urine. The annual Scientific Meeting of Endocrine Society of Australia and the Society for Reproductive Biology (ESA/SRB), Gold Coast, Queensland, Australia 2012.</li> <li>• <b>Singh GKS</b>, Desai R, Jimenez M, Handelsman DJ Quantitation of testosterone and nandrolone using dried blood spots (DBS) for steroid pharmacological study. 61st Conference on Mass Spectrometry and Allied Topics, American Society of Mass Spectrometry (ASMS), Minneapolis, Minnesota, United States 2013.</li> <li>• Desai R, <b>Singh GKS</b>, Turner L, Jimenez M, Handelsman DJ. Dried Blood Spots (DBS) Blood Sampling coupled with Liquid Chromatography, Tandem Mass Spectrometry (LC-MS/MS) assay to investigate pharmacokinetics and pharmacodynamics of subcutaneous injection of steroid esters in an oil vehicle. Indian Society of Mass Spectrometry (ISMAS-WS) Parwanoo, Himachal Pradesh, India 2014</li> </ul>
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		<ul style="list-style-type: none"> <li>• <b>Gurmeet Kaur Surindar Singh.</b> Regulation of Phase I and Phase II Steroidogenic enzymes in AD. International Research Network Initiative (IRNI) 2022 23-24 Nov 2022 (Invited speaker).</li> </ul>
10	Research Grants	<ul style="list-style-type: none"> <li>• Elucidating the Neuroprotective Signalling Cascade of Nestorone®, a Synthetic Progestin, in Modulating Alzheimer's Disease (PI FRGS 2023-2026 RM 158,107)</li> <li>• Exploring The Potential Neuroprotective Properties of Astaxanthin Nanoemulsion in Modulating Brain Insulin Resistance in an Alzheimer's Disease Rat Model (PI KEPU 2023-2024 RM 40,000)</li> <li>• Unravelling The Mechanisms Of Andrographolide Derivatives In Metastasis Breast Cancer Using MDA-MB-231 Cells Induced Xenograph Model (Member FRGS 2022-2024 RM 182,966)</li> <li>• Unravelling the Nootropics Potential of <i>Polygonum minus</i> and its Bioactive Components: Molecular Insight into Therapeutic to Alleviate Dementia Neuropathology Model (Member FRGS 2021-2024 RM 150,245)</li> <li>• Deciphering The Neuroprotective Role Of Astaxanthin Nanoemulsion In Alzheimer's Disease (PI FRGS-2019-2022 RM 157,200).</li> <li>• Scientific Research on Predominant Symptoms Among Paucisymptomatic Covid 19 Patients in Selangor (Member LESTARI COVID 2020-2021).</li> <li>• Neuroprotective Effects Of <i>Polygonum minus</i> on Cognitive Dysfunctions and Hippocampal Neuronal Injury in Cerebral Hypoperfusion Dementia Model (Member UCS DUCS 2.0_2020-2022).</li> <li>• Exploring the Role of Liver Ultrastructure in the Pathophysiology of Metabolic Syndrome Model (Member UCS DUCS 2.0_2020-2022).</li> <li>• Unravelling The Changes in Phase II Enzymes and Neurosteroid Metabolism during the Progression of Alzheimer's Disease (PI FRGS-2015-2018 RM 149,700).</li> <li>• A Study On The Effect Of <i>Eurycoma longifolia</i> and <i>Polyalthia bullata</i> on Testicular Morphology and Androgens in Male Sprague-Dawley Rats (Member LESTARI 2016-2018).</li> <li>• Uncovering The Mechanisms of Microbial Biotransformed Antitumour Agents using Metabolomics and Gene Expression Analysis (Member LESTARI 2015-2017).</li> <li>• Understanding The Role Of Liver Sinusoidal Endothelial Cells in the Pathophysiology of Age-Related Insulin Resistance (Member FRGS 2016-2018).</li> <li>• Elucidation Of Microbial Biotransformed Mechanism of Antitumor Agents Using Metabolomics and Gene Expression Analysis (Member FRGS 2016-2018).</li> <li>• Anabolic Androgenic Steroid Drugs : Mechanism Of Action On Male Fertility (PI FRGS 2010-2012).</li> <li>• Bisphenol A (BPA) Molecular Mechanisms on Hormone Receptors Of Juvenile Sprague-Dawleys Rats (PI DANA UiTM 2009-2010).</li> </ul>
11	Consultation Projects	<ul style="list-style-type: none"> <li>• Exploring The Protective Role Of Schizophyllum Commune Aqueous Extract Against Oxidative Stress And Inflammation (PI Contract Research 2024)</li> <li>• Toxicity And Hepatoprotective Effect Of Schizophyllum Commune Aqueous Extract (PI Contract Research 2023-2024)</li> <li>• Acute And Dermal Toxicity Study Of Living Jungle® Mosquito Repellent (PI Contract Research 2018-2019)</li> </ul>
12	Awards	<ul style="list-style-type: none"> <li>• Postgraduate Research Support Scheme (PRSS) Award, University of Sydney, 2012-2014</li> <li>• Concord Repatriation General Hospital (CRGH) Research Travelling Award, 2013-2014.</li> <li>• Gold - Invention, Innovation &amp; Design Exposition UiTM (iidex) 2017. Living Jungle mosquito repellent: Innovative product against Dengue and Zika.</li> <li>• Best Poster: IPNACS 2017 (Tawana Bangkok). Exploring the Aphrodisiac Potential of Tongkat Ali Hitam (<i>Polyalthia bullata</i>) In Male Sprague-Dawley Rats.</li> </ul>

		<ul style="list-style-type: none"> <li>• Best Poster: IPNACS 2017 (Tawana Bangkok). Intestinal Absorption of Astaxanthin Emulsion Formulations in Rats.</li> <li>• Gold-PharmIIDEX 2019. Discovery of Novel Alpha Glucosidase Enzyme Inhibitors.</li> <li>• Bronze- Discovery of Novel Alpha Glucosidase Enzyme Inhibitors. Invention, Innovation &amp; Design Exposition UiTM (IIDEX) 2019</li> <li>• Gold-PharmIIDEx StrepIHC: Innovative Alternative Approach in Developing Alzheimer's Disease Rodent Model 21 Sept 2021</li> <li>• Gold-PharmIIDEx NANO-ASTA: A Potential Neuroprotective Agent. 10 August 2021.</li> <li>• Gold PharmIIDEx: Breaking The Code: Deciphering Andrographolide Derivatives In Metastatic Breast Cancer With MDA-MB-231 Xenographs. 16 Aug 2023</li> </ul>
13	Involvement in Professional Organisations	<ul style="list-style-type: none"> <li>• Endocrine Society, Member (2014-2015)</li> <li>• American Society of Mass Spectrometry (ASMS), Member (2013).</li> <li>• Malaysian Pharmaceutical Society (MPS 2016-present)</li> </ul>
14	Participation In Continuing Education	<ul style="list-style-type: none"> <li>• Presenter, 5th International Conference On Pharmaceuticals, Nutraceuticals &amp; Cosmetic Science (IPNACS) 2017.</li> <li>• Presenter, Secretariat 5<sup>th</sup> International Postgraduate Conference on Pharmaceutical Sciences 2017 (iPoPS 2017).</li> <li>• Participant, International IPNACS, 2015, Nov 23-13, Melaka, Malaysia</li> <li>• Participant, Malaysian Association of Clinical Biochemists Conference, 2015, Doubletree Hotel, Kuala Lumpur, August 3-5, 2015</li> <li>• Presenter, 16<sup>th</sup> International Congress of Endocrinology and the Endocrine Society's 96<sup>th</sup> Annual Meeting and Expo (ICE/Endo). June 21-24, 2014, McCormick Place West, Chicago, United States.</li> <li>• Presenter, 20<sup>th</sup> International Mass Spectrometry Conference Geneva (IMSC), 24-29 August, 2014, Centre International De Conference Geneva (CICG), Geneva, Switzerland</li> <li>• Presenter, 61st Conference on Mass Spectrometry and Allied Topics by The American Society of Mass Spectrometry (ASMS), June 9-13, 2013, Minneapolis, Minnesota, United States.</li> <li>• LC/MS Workshop: Techniques of Electrospray, APCI and APPI. American Society for Mass Spectrometry. June 8-9, 2013, Minneapolis, Minnesota, United States.</li> <li>• Anzac Research Institute 12<sup>th</sup> Annual Symposium, Bone Biology and Osteoporosis. September 6, 2013</li> <li>• Clinical Diagnostics and Mass Spectrometry Discussion Group. September 25, 2013, National Measurement Institute, North Ryde, Sydney</li> <li>• 13<sup>th</sup> Sydney University Reproduction Forum. Anzac Research Institute. November 15, 2013</li> <li>• Presenter, The annual Scientific Meeting of Endocrine Society of Australia and the Society for Reproductive Biology. 26-29 August 2012. Gold Coast.</li> <li>• ANZAC Research Institute 11<sup>th</sup> Annual Symposium. Training and Workshop on LC-MS/MS. 13 September 2012. ANZAC Research Institute</li> </ul>
15	Undergraduate Supervision	<p>Year 2015/2016</p> <ol style="list-style-type: none"> <li>1. Name: Wan Norshajihah Wan Samsuddin Thesis Title: The effects of <i>Polyalthia bullata</i> and <i>Eurycoma longifolia</i> on body, testis and seminal vesicle weight</li> <li>2. Name: Norfairusliza binti Normanshah Thesis Title: The Effects of <i>Eurycoma longifolia</i> and <i>Polyalthia bullata</i> in Body Weight And Male Reproductive Organs: Testes And Epididymis</li> <li>3. Name: Mirrah Nadhirah</li> </ol>

		<p>Thesis Title: The Influence of <i>Eurycoma longifolia</i> and <i>Polyalthia bullata</i> on Body, Testes And Prostate Weight</p> <p>Year 2016/2017</p> <ol style="list-style-type: none"> <li>1. Name: Muhammad bin Samsusah Thesis Title: Testicular 17 beta hydroxysteroids dehydrogenase and serum testosterone level in male SD rats treated with <i>Eurycoma longifolia</i> and <i>Polyalthia bullata</i></li> <li>2. Name: Muhammad Fiqri bin Zolkurnain Thesis Title: The effects of <i>Eurycoma longifolia</i> and <i>Polyalthia bullata</i> on enzyme CYP17A1 expression and androstenedione levels in Male SD rats.</li> <li>3. Name: Umair Alhadi bin Mohd Sahri Thesis title: Testicular 5 Alpha Reductase (Type 2) expression and Dihydrotestosterone (DHT) hormone level in Male SD rats treated with <i>Eurycoma longifolia</i> and <i>Polyalthia bullata</i>.</li> </ol> <p>Year 2018/2019</p> <ol style="list-style-type: none"> <li>1. Name: Nur Hafizah Binti Ab.Rahim Thesis title: Unraveling the Regulation of Hippocampal UGT1A1 in Alzheimer's Disease using Intrahippocampal Streptozotocin induced Animal model</li> <li>2. Name: Nur Syafera Binti Suhaili Thesis title: A Study on the Sult1e1 Regulation in Hippocampus of Alzheimer's Disease Rat Model</li> </ol> <p>Year 2019/2020</p> <ol style="list-style-type: none"> <li>1. Name: Nur Saffia Binti Mohd Nasir Research title: Reliability of Using Chemicals to Induce Alzheimer's Disease-Like Cognitive Dysfunction in Rodents.</li> <li>2. Name: Nur Adiliah Ramli Research title: Streptozotocin Rodent Alzheimer's Disease Model: Understanding the Relevant Mechanisms.</li> </ol> <p>Year 2020/2021</p> <ol style="list-style-type: none"> <li>1. Name: Nurul Ashikin Binti Mazlan Research title: Neuroprotective Properties of Nutraceuticals in Regulating Neurodegenerative Dementia</li> <li>2. Name: Siti Norhafizah binti Mohd Sahini Research title: Effect of Environmental Enrichment in Managing Dementia using Rodent Model.</li> </ol> <p>Year 2021/2022</p> <ol style="list-style-type: none"> <li>1. Name: Nur Fatimah Khairunisah Binti Abdul Fatah Research title: Neuroprotective Activity of Astaxanthin: Distribution Comparison Between Astaxanthin in Oil Solution and Macro Size Emulsion Formulation in Different Regions of Rats' Brain.</li> <li>2. Name: Suhailah Anisah Binti Mohamad Research Title: Oil versus Nanoemulsion Astaxanthin Formulation: A Study of Distribution in the Spleen Axis</li> </ol>
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		<p>Year 2022/2023</p> <ol style="list-style-type: none"> <li>1. Name: Anis Aisyah Binti Mohd Dzahari Research title: Antioxidant Activity of Astaxanthin Nanoemulsion and Astaxanthin in Oil Using Ferric Reducing Antioxidant Power (FRAP) Assay</li> <li>2. Name: Siti Nor Asiah Binti Mohd Khir Research title: Enhanced Hydroxyl Radical Scavenging Activity in Astaxanthin Nanoemulsion Compared to Astaxanthin in Oil</li> <li>3. Name: Zahin Hakimi Faizal Research title: Comparative Analysis of Astaxanthin Nanoemulsion and Astaxanthin in Oil Using a DPPH assay</li> </ol>
16	Postgraduate Supervision	<ol style="list-style-type: none"> <li>1. Name: Mazzura Wan Chik (PhD, Main SV) Year : 2020_2023 Thesis: Deciphering The Neuroprotective Role of Astaxanthin Nanoemulsion in Alzheimer's Disease</li> <li>2. Name: Ibrahim Ahmed Shaikh (PhD, Main SV) Year: 2022_present Thesis: Neurocognitive Enhancement Potential of Green Synthesized Plant-Based Nanoparticles On Alzheimer's Disease Using In Vitro Neuroblastoma Cell Line And In Vivo Mice Model.</li> <li>3. Name: Mannasaheb Basheerahmed (PhD, co-SV) Thesis: Exploring the neuroprotection of plant-based green synthesized Nanoparticles against streptozotocin-induced cognitive impairment in mice. Year: 2022-present</li> <li>4. Name: Siti Fatin Farhanah Binti Othman (Masters, co-SV) Year : 2020_present Thesis: Understanding The Neurobiological Mechanisms Of Polygonum Minus To Ameliorates Cognitive Dysfunction In Vascular Dementia Rat Model</li> <li>5. Name: Nur Shahirah Shahrudin (Masters, co-SV) Year: 2023_present Thesis: Unraveling The Mechanisms of Andrographolide Derivatives in Metastasis Breast Cancer Using MDA-MB-231 Cells Induced Xenograph Model</li> </ol>