

Personal Details	DR. VARATHARAJAN RAJAVEL
Academic Qualifications	B. Pharm (Dr. MGR Medical University, Tamil Nadu, India) M. Pharm (Annamalai University, Tamil Nadu, India . Ph.D (University of Malaya, Kuala Lumpur, Malaysia)
Administrative Duties	Dean/Dep. Dean/Coordinator/etc <u>Coordinators/ etc. for the year 2020 only</u> <ol style="list-style-type: none"> Course Coordinator for the subject anatomy and Physiology -B.Pharm (Hons) 2020, Semester -1 Course Co-Coordinator for the subject Central Nervous System & Pharmacotherapy –III-B.Pharm (Hons) 2020, Semester -1 Co-lecturer for the subject Peripheral Nervous System & Pharmacotherapy –II-B.Pharm (Hons) 2020, Semester -1 Co-lecturer for the subject Pharmacology (BPT) 2020 Semester -2 Course Coordinator for the subject Research Methodology and Biostatistics II - B.Pharm (Hons) 2020, Semester -2 Course Co-Coordinator for the subject Pulmonary, Renal Systems & Pharmacotherapy –II-B.Pharm (Hons) 2020, Semester -2 Co-lecturer for the subject Antimicrobials & Anti-infectives–III-B.Pharm (Hons) 2020, Semester -2 Co-lecturer for the subject Pharmacology, M. Sc Pharmacy- 2020 Ph.D Programme Coordinator from August 2017 onwards. <u>Appointment</u> <ol style="list-style-type: none"> Appointed as a Chair Person of the board of examiners for Master in Science (Medical Physiology) viva voce examination on thesis title: Investigation of the effect of Nyctanthes arbor-tristis leaf extract on high glucose-induced vascular hyperpermeability. Ref. no: AIMST/ CPS/MSCMEDPHYSIOLOGY/ 170820 in Faculty of Medicine, AIMST University, Semeling Kedah, Malaysia (Aug 2020). <u>E-Conference attended</u> <ol style="list-style-type: none"> Participated in the e-Conference entitled ‘International Conference on Healthy Aging & Research’. Organized by Sarada Vilas College of Pharmacy, Mysuru, Karnataka India held on 26th & 27th August 2020 Attended the e-Conference entitled ‘International E-conference on Biotechnology, Bioinformatics, and Biomedicine 2020’ organized by Faculty of Applied Sciences, AIMST University, Malaysia held on 24-25th August 2020 <u>E-Conference Organizing Committee Member</u> <ol style="list-style-type: none"> Organized Zoom online webinar behalf of AIMST University’s Institutional Biosafety Committee (IBC) for Biosafety & Biosecurity Month (October 2020) at AIMST University, Malaysia. Organizing Committee Member for the International Conference on Healthy Aging & Research Organized by Sarada Vilas College of Pharmacy, Mysuru, Karnataka India held on 26th & 27th August 2020 <u>Webinar - Attended:</u> <ol style="list-style-type: none"> Attended Webinar on ‘Demystifying diabetes: Is Type 2 DM reversible?’ Organised Faculty of Applied Sciences, AIMST University, Semeling, 08100 Bedong, Kedah, Malaysia on 27th November 2020

	<ol style="list-style-type: none"> 2. Attended Webinar Series on 'Novel eco-friendly applications of mixed solvency concept in various fields of science' Organised by Faculty of Pharmacy, AIMST University, Kedah 08100, Malaysia on 19th November 2020 3. Attended International webinar on research - innovation series 'Cutting Edge Stereotaxy and its Application' on 14th September 2020 organised by Saveetha Institute of Medical and Technical science, Tamil Nadu. India. 4. Attended webinar on 'Scope for students in the Field of Pharmacy' Organised by Dr. Kalam College of Pharmacy, Thanjavur in association with GRT institute of Pharmaceutical Education and Research, Tiruttani, Tamil Nadu, India on July 11th 2020 5. Attended webinar on titled 'Research Ethics in Preclinical Research' Organized by the AIMST University Human and Animal Ethics Committee and Research Management Center, AIMST University; on 29th June 2020, in AIMST University, Semeling Campus, Kedah, Malaysia. 6. Participated in Google meet online Webinar presentation on 'Animal welfare, ethics and Experimentation'. Organized by Sarada Vilas College of Pharmacy, Mysuru, Karnataka, India held on 28th May 2020 <p><u>Seminars, Workshops and Symposium Attended:</u></p> <ol style="list-style-type: none"> 1. Attended one day seminar cum workshop on titled "Teaching & Learning and Assessment Strategies workshop" Organized by CPD committee, Faculty of Pharmacy on 5th March 2020, in AIMST University, Semeling Campus, Kedah, Malaysia. 2. Participated in 'Road To Victory' training for AIMST Marketing Strategy delivered by Megat Nazahar, Director of Business Development; organized by Marketing & International Office, AIMST University; on 3rd March, 2020, in LT-1, Dental Building, AIMST University, Semeling Campus, Kedah, Malaysia. 3. Attended seminar on titled 'Universal Health Coverage. What, Why & How' Organized by Faculty of Medicine on 28th February 2020, in AIMST University, Semeling Campus, Kedah, Malaysia. 4. Attended seminar on titled 'I Fit and Eat Right' Organized by Library Department on 4th February 2020, in AIMST University, Semeling Campus, Kedah, Malaysia. <p><u>Post Graduate Thesis Evaluation</u></p> <p><u>Doctor of Philosophy (Ph.D) - 01</u></p> <ol style="list-style-type: none"> 1. Beneficial effects of Omega-3 poly unsaturated fatty acids in Gestational Diabetes mellitus effects on Macrosomia and risk of Developing Type 2 Diabetes. Vels Institute of Science, Technology and Advanced Studies (Vistas), Chennai, Tamil Nadu, India. (September 2020) <p><u>Abstracts and Presentations in National and International Conference</u></p> <ol style="list-style-type: none"> 1. Muthuraman A, Giap LK, Sohrab AHS, Varatharajan R, Musthafa F. Presented on 'Overview of risk factors & biomarkers in the management of vascular dementia' in zoom online webinar E-Conference in 'International Webinar on Dementia & Neuroscience– 2020. Organized by International House, London, United Kingdom; on 21st & 22nd, September, 2020. <p><u>Professional training courses completed</u></p> <ol style="list-style-type: none"> 1. Dr. Rajavel Varatharajan completed National Institute of Health (NIH) certified course on '<i>Principal Investigators Training</i>' on 15th October, 2020.
Publications (last 5 years)	<p><u>List of Papers Published</u></p> <ol style="list-style-type: none"> 1. Pushparaj Vijayakumar, Rajavel Varatharajan, Jibi Paul. Effect of Star Excursion Balance

Training Program on Agility among Young Men Cricket Players. *IJMAES*, Vol 6 (3), 784-798, **2020**.

2. Jaya Raja Kumar, **Rajavel Varatharajan**, Arunachalam Muthuraman. Preparation and Evaluation of Povidone Iodine based Microsponge for Wound Healing Activity in Rats. *J. Pharm. Sci. & Res.* Vol. 12(3), **2020**, 436-442
3. Yohanathan Bavani, Kasi Marimuthu, **Rajavel Varatharajan**, Subramani Parasuraman and Arunachalam Muthuraman. Investigate the Effect of Fluvastatin and Pravastatin on Gentamicin-induced Acute Kidney Injury in Sprague Dawley Rats. *EC Pharmacology and Toxicology*. 7.11 (**2019**): 64-71. (**PubMed**).
4. **Rajavel Varatharajan**, Premalatha Manikam Vesagam, Kiren Sharma, Chen Teck Yee, Venugopal Vijayan, Arunachalam Muthuraman. Effect of edaravone in isoniazid-induced hepatotoxicity in sprague dawley rats. *Rapports De Pharmacie* Vol.4 (4), **2018**, 496-501.
5. **Rajavel Varatharajan**, Jaya Raja Kumar Kalaimani, Vijayan Venugopal, Selvadurai Muralidharan, Jan Yong Shu Ching, Kamini a/p Maniam, Kevin Tiong Kai Kin. Design, Optimization, Formulation and Evaluation of Edaravone Nanoparticles by Using Box-Behnken Design Surface Response Methodology. *Malaysian Journal of Pharmacy*, Vol 3, Issue 1, November **2017**, Pp: 46
6. **Rajavel Varatharajan**, Selvadurai Muralidharan, Venugopal Vijayan, Chandran Jaganmohan. Bio-Analytical Method Development and Validation of Edaravone by RP-HPLC: Application to Human Clinical Studies. *Rapports De Pharmacie* Vol.3 (3), **2017**, 408-412.
7. **Rajavel Varatharajan**, Lee Hui Jun, Tan Zhi Kai, Lim Wai Jian, James Anburaj, Venugopal Vijayan. Morphological and morphometric study of edaravone in gentamicin-induced nephrotoxicity in Sprague Dawley rats. *Journal of Young Pharmacists*, **2017**; 9:31-35 (**Impact Factor 0.7**)
8. Balakumar P, Witness Koe WE, Gan YS, Jemay Puah SM, Kuganesswari S, Prajapati SK, **Varatharajan R**, Jayachristy SA, Sundram K, Bahari MB. (**2016**) Effects of pre and post-treatments with dipyrindamole in gentamicin-induced acute nephrotoxicity in the rat. *Regul Toxicol Pharmacol.* **2017**; 84:35-44. (**Impact Factor: 2.031**)
9. **Rajavel Varatharajan**, Li Xin Lim, Kelly Tan, Chai Sze Tay, Yi Leng Teoh, Shaikh Sohrab Akhtar, Mani Rupeshkumar, Ivy Chung, Nor Azizan Abdullah, Sokkalingam A. Dhanaraj, Pitchai Balakumar. Effect of edaravone in diabetes mellitus-induced nephropathy in rats. *Korean J Physiol Pharmacol.* **2016**:20:333-340 (**Impact Factor 1.77**)
10. Vijayan V, Muralidharan S, Parasuraman S, Vasanthraj P, **Varadharajan R**. Nanoswimmers- A Advance Tool For Medical Application. *Rapports De Pharmacie.* **2015**: 1(3):118-121.
11. **Rajavel Varatharajan**, Lee Hui Jun, Tan Zhi Kai, Lim Wai Jian. Edaravone Attenuates Gentamicin-Induced Nephrotoxicity in Rats. *Malaysian Journal of Pharmacy*, Vol 2, Issue 1, November **2015**, Pp: 180.
12. P Balakumar, S Prajapati, **R Varatharajan**, SA Jayachristy, K Sundram, MB Bahari. Differential Effects of Pre and Post treatments with Low-Dose Dipridamole in Aminoglycoside-Induced Nephrotoxicity in Rats. *Malaysian Journal of Pharmacy*, Vol 2, Issue 1, November **2015**, Pp: 78.
13. **Rajavel Varatharajan**, Ivy Chung, Nor Azizan Abdullah. An Overview of Antioxidant Act as Pro-Oxidant. *Rapports De Pharmacie*, **2015**;1(2):54-58.
14. **Rajavel Varatharajan**, Jaganathan Saravanan, Ivy Chung and Nor Azizan Abdullah. An Overview of Diabetic Nephropathy. *Pharmacology, Toxicology and Biology Reports*.

	<p>(2015) 1 (3) 104-110.</p> <p>Book Chapters Published (e-books)</p> <ol style="list-style-type: none"> 1. Mahendran B, Vaishnavi T, Gowda V, Islam J, Rishitha N, Muthuraman A, Varatharajan R. Part-II: Herbal medicines in cancer therapeutics: Chapter 5. Current and Future Perspectives of Marine Drugs for Cancer Disorders: A Critical Review. Rohit Dutt, Anil K. Sharma, Raj K. Keservani and Vandana Garg (Eds.) Promising Drug Molecules of Natural Origin. Apple Academic Press Inc., CRC Press (Taylor & Francis Group), Waretown, New Jersey 08758, USA. (May 2020). [ISBN: 9781771888868] http://appleacademicpress.com/promising-drug-molecules-of-natural-origin-9781771888868 2. Muthuraman A, Varatharajan R, Jaya Raja Kumar K. Chapter 5: Zebrafish models for screening of cardiotoxic agents and it exists outside the ambit of cardiovascular research. Eleanor H. Bennington (Ed). Nova Science Publishers Inc. New York, USA, 2019. [ISBN: 978-1-53616-157-1 (e-book)]. https://novapublishers.com/shop/horizons-in-world-cardiovascular-research-volume-17/
On-going Research	<p>2 Research for PG students by the FRGS grant</p> <ol style="list-style-type: none"> 1. Topic: Investigations on potential and possible mechanisms of palm oil mill effluent based beta-carotene in experimental models of vascular dementia 2. Topic: A study on targeting and inhibiting triple negative breast cancer cells using siRNA-nanobioconjugated mAbs <p>UG Research for B.Pharm Students (3)</p> <p>Topic 1: Phytochemical screening and Formulation of Nanoparticles by using Aqueous extract of a Plant.</p> <p>Topic 2: Antioxidant activity and Formulation of Nanoparticles by using Methanol extract of a Plant</p> <p>Topic 3: Antimicrobial screening and Formulation of Nanoparticles by using Ethanol extract of a Plant.</p>
Completed Research	<p>Completed Researches</p> <p>FRGS Grants completed : 02 (as a co-investigator)</p> <p>AIMST University grants: 05 (as a Principle investigator and co-investigator)</p>
Research Grants	<p>FRGS Grants:</p> <p>Topic: Investigations on potential and possible mechanisms of palm oil mill effluent based beta-carotene in experimental models of vascular dementia</p> <p>Co-Investigator</p> <p>Duration: Three years (2019 - 2022), Status: On going</p> <p>FRGS Grant Funding - RM: 189,800.00</p> <p>Reference Code: FRGS/1/2019/SKK08/AIMST/02/3</p> <p>Application ID: 296718-331418</p> <p>Topic: A study on targeting and inhibiting triple negative breast cancer cells using siRNA-nanobioconjugated mAbs</p> <p>Principle Investigator</p> <p>Duration: Three years (2017 - 2020), Status: On going</p> <p>FRGS Grant Funding - RM: 168,000.00</p>

Reference Code: FRGS/1/2017/SKK08/AIMST/02/3

Application ID: 192121-208187

Topic: A study on the molecular mechanism of PAC-PLGA-PEG-mAb loaded immunonanoscaffold targeting triple negative breast cancer.

Co-Investigator

Duration: Three years (2015 - 2017), **Status:** Completed

FRGS Grant Funding - RM: 121,200.00

Reference Code: FRGS/1/2015/SKK09/AIMST/02/4

Application ID: 107246-135699

Topic: Study on histopathological and molecular mechanistic aspects of low-dose pleiotropic effects of antiplatelet and antihyperlipidemic drugs in aminoglycoside-induced nephrotoxicity in animal model

Co-Investigator

Duration: Three years (2014 - 2017), **Status:** Completed

FRGS Grant Funding - RM: 159,300.00

Reference Code: FRGS/2/2014/SKK01/AIMST/02/2

Application ID: 66368-89093

AIMST University Grants


 **Topic :** Effect of Edaravone in Diabetes Mellitus-induced Nephropathy in Rats

Principal Investigator

Duration: One year (2014-2015)

AIMST Grant Funding - RM: 10,000.00

Status: Completed


 **Topic:** Effect of low-dose combination of fenofibrate and dipyridamole in diabetes mellitus-induced renal abnormalities

Co-Investigator

Duration: Two years (2014-2015)

AIMST Grant Funding - RM: 20,000.00

Status: Completed

 **Topic:** Synthesis of novel indolo phenoxy acetic acid pyrazoline derivatives and pharmacological evaluation for their Anti-hyperglycemic activity.

Co-Investigator

Duration: Two years (2014-2015)

AIMST Grant Funding - RM: 20,000.00

Status: Completed


 **Topic:** Effect of morin in paracetamol-induced hepatotoxicity in rats

Co-Investigator

Duration: One year (2014-2015)

AIMST Grant Funding RM: 10,000.00

Status: Completed

 **Topic:** Effect of Ellagic Acid in Type 2 Diabetes Mellitus-Induced Nephropathy in Rats

Co-Investigator

Duration: One year (2014-2015)

AIMST Grant Funding RM: 10,000.00

	Status: Completed
Awards	‘SUSHRUTA BEST SCIENTIST AWARD 2018-2019’ Based on the complete research publications; and experience criteria. On the occasion of 9 th National Conference on Natural Sciences held on 24 th August 2019 at Pushkaram College of Agriculture Sciences, Pudukkottai, Tamil Nadu, India . Organized by ‘Bose Science Society’ established under the Charter of TNSRO , Affiliated with VIPNET , Vigyan Prasar, Department of Science & Technology, Govt. of India, New Delhi , Vide Authorization No: VP-TN0090/27.10.2017
Professional Membership	Of any professional society <ol style="list-style-type: none"> 1. Tamilnadu State Pharmacy Council, Tamil Nadu (India). (5206 A1) 2. Alumini Association, Sankaralingam Bhuvanewari College of Pharmacy, Sivakasi, Tamil Nadu (India). 3. Alumini Association, Annamalai University, Tamil Nadu (India). 4. Alumini Association, University of Malaya, Kuala Lumpur, Malaysia. 5. Member of Bose Science Society (M627/BSS/2019; 14.08.2019) 6. Fellow of Bose Science Society (FBSS; F627/BSS/2019; 14.08.2019)
Supervision	Post graduates students (02) <ol style="list-style-type: none"> 1. Co-Supervisor for Doctor of Philosophy (Pharmacy) for Mr. Lim Khian Giap on title: Investigations on potential and possible mechanism of palm oil effluent beta- carotene in experimental model of vascular dementia. Ref. no: AIMST/CPS/SPV_PHDPHARMACY/FOP/160320(7) in Faculty of Pharmacy, AIMST University, Semeling Kedah, Malaysia. (March 2020 onwards) 2. Co-Supervisor for Doctor of Philosophy (Pharmacy) for Mr. Sohrab Aktar Husain Shaikh on title: Therapeutic investigation of selected lead compounds for the assessment of cognitive function in experimental animals. Ref. no: AIMST/CPS/SPV_PHDPHARMACY/FOP/251119(2) in Faculty of Pharmacy, AIMST University, Semeling Kedah, Malaysia.
Teaching	The courses (including Post Graduate) <p><u>Under Graduate B. Pharm (Hons) for the year 2020 only</u> General Pharmacology and Toxicology (Theory, Tutorial & Practical) Pulmonary and Renal System (Theory, Tutorial & Practical) Central Nervous System (Theory, Tutorial & Practical) Anatomy and Physiology (Theory, Tutorial & Practical) Research Methodology and Biostatistics (Theory, Tutorial & Practical) Peripheral nervous system and Pharmacotherapy (Theory, Tutorial & Practical) Antimicrobials & Anti-infectives (Theory and Tutorial) Cardio vascular system (Practical)</p> <p><u>Under Graduate BPT (Hons)</u> Basic Pharmacology (Theory and Tutorial)</p> <p><u>Post Graduate (M. Sc Pharmacy)</u> Pharmacology (Theory and Tutorial)</p>
Areas of Expertise	Renal Pharmacology, and Formulation & Development of Drugs
Contact Details	varadharajeen@aimst.edu.my 1284