Personal Details	**Manickam Ravichandran**
Academic Qualifications	BSc Botany (Madurai Kamaraj University, TN, India) MSc Medical Microbiology (Chiristian Medical College, Vellore, TN, India) PhD Biotechnology (Anna University, Chennai, TN, India)
Administrative Duties	Dean, Faculty of Applied Sciences
Publications (last 5 years)	**Publications including books**
1.	Xian, T. H., Sinniah, K., Yean, C. Y., Krishnamoorthy, V., Bahari, M. B., **Ravichandran, M.,** & Prabhakaran, G. (2020). Immunogenicity and protective efficacy of a live, oral cholera vaccine formulation stored outside-the-cold-chain for 140 days. **BMC Immunology**, 21(1), 29. https://doi.org/10.1186/s12865-020-00360-1
2.	Murugaiah, C., Nik Mohd Noor, N.Z., Al-Talib, H., Mustafa, S., **Manickam, R**., Pattabhiraman, L., 2020. Immunohistochemical, histological and ultrastructural evaluation of protection provided by cholera vaccine against V. cholerae O139. **Microbial Pathogenesis** 140, 103964.
3.	Naaz, F., Ahmad, F., Lone, B. A., Pokharel, Y. R., Fuloria, N. K., Fuloria, S., **Ravichandran, M**., Pattabhiraman, L., Shafi, S., & Yar, M. S. (2020). Design and synthesis of newer 1, 3, 4-oxadiazole and 1, 2, 4-triazole based Topsentin analogues as anti-proliferative agent targeting tubulin. **Bioorganic Chemistry**, 95, 103519.
4.	Ravintheran, S. K., Sivaprakasam, S., Loke, S., Lee, S. Y., **Manickam, R.,** Yahya, A., Croft, L., Millard, A., Parimannan, S., & Rajandas, H. (2019). Complete genome sequence of Sphingomonas paucimobilis AIMST S2, a xenobiotic-degrading bacterium. **Scientific Data**, 6.
5.	Haider, M.R., Ahmad, K., Siddiqui, N., Ali, Z., Akhtar, M.J., Fuloria, N., Fuloria, S., **Ravichandran, M**., Yar, M.S., 2019. Novel 9-(2-(1-arylethylidene)hydrazinyl)acridine derivatives: Target Topoisomerase 1 and growth inhibition of HeLa cancer cells. **Bioorganic Chemistry** 88, 102962.
6.	Prabhakaran, G., Bhore, S. J., & **Ravichandran, M.** Development of a bait carrier material for apple snail (*Pomacea maculata*) based on its feed preferences using snail attractant tracking device. **Journal of Natural Science, Biology and Medicine**, 2019, 10(1), 8.
7.	Simon C, Gan QF, Kathivaloo P, Mohamad NA, Dhamodharan J, Krishnan A, Sengodan B, Palanimuthu VR, Marimuthu K, Rajandas H, **Ravichandran M**, Parimannan S. Deciduous DPSCs Ameliorate MPTP-Mediated Neurotoxicity, Sensorimotor Coordination and Olfactory Function in Parkinsonian Mice. **International Journal of Molecular Sciences** 2019 Jan 29;20(3). pii: E568. doi: 10.3390/ijms20030568.
8.	Xian, T. H., Parasuraman, S., Sinniah, K., Ravichandran, M., & Prabhakaran, G. Repeated dose toxicity evaluation of a cold chain-free, live, attenuated oral cholera vaccine in Sprague Dawley rats. **Vaccine** 37 (2019) 711–720 doi: 10.1016/j.vaccine.2018.12.027. Epub 2019 Jan 7.
9.	Al-Fendi A1, Shueb RH, Foo PC, **Ravichandran M**, Yean CY Complete Genome Sequence of Lytic Bacteriophage VPUSM 8 against O1 El Tor Inaba *Vibrio*

	cholerae. **Genome Announcements**. 2017 May 25;5(21). pii: e00073-17. doi: 10.1128/genomeA.00073-17.
10.	Murugaiah C, Noor NZ, Mustafa S, **Manickam R,** Pattabhiraman L. Evaluation of intestinal damage caused by *V. cholerae* O139, an in vivo study. **Microbial Pathogenesis**. 2017 Apr;105:25-29. doi: 10.1016/j.micpath.2017.02.002. Epub 2017 Feb 4.
11.	Prabhakaran G, Subhash Bhore J, and **Ravichandran M.** Development and Evaluation of Poly Herbal Molluscicidal Extracts for Control of Apple Snail (*Pomacea maculata*). **Agriculture** 2017, 7(3), 22
12.	Subhash Janardhan Bhore and Manickam Ravichandran. 4Bs Conference: A brief commentary on the 3rd Regional Conference on Biosensors, Biodiagnostics, Biochips and Biotechnology 2016. **Malaysian Journal of Microbiology**, 12:5 (Editorial).
13.	Perumal V, Hashim U, Gopinath SC, Haarindraprasad R, Poopalan P, Liu WW, Ravichandran M, Balakrishnan SR, Ruslinda AR. A new nano-worm structure from gold-nanoparticle mediated random curving of zinc oxide nanorods. **Biosensor and Bioelectronics.** 2016 Apr 15;78:14-22. doi: 10.1016/j.bios.2015.10.083. Epub 2015 Oct 30.
14.	Banga Singh KK, Nisha M, Lau H, **Ravichandran M**, Salleh M Alteration in apyrase enzyme attenuated virulence of *Shigella flexneri*. **Microbial Pathogenesis**.2016 vol: 91 pp: 123-8
15.	Sivachandran, P., Heera, R., Lalitha, P., **Ravichandran, M.,** Sivadasan, S., & Marimuthu, K. (2015). An overview of leech and its therapeutic applications. **Journal of Coastal Life Medicine**. 2015;3(5):405-413
16.	Heera, Rajandas, Parimannan Sivachandran, Suresh V. Chinni, Joanne Mason, Larry Croft, **Manickam Ravichandran**, and Lee Su Yin. 2015. "Efficient Extraction of Small and Large RNAs in Bacteria for Excellent Total RNA Sequencing and Comprehensive Transcriptome Analysis." **BMC Research Notes** 8 (1). doi:10.1186/s13104-015-1726-3.
17.	Liew, P. S., Lertanantawong, B., Lee, S. Y., **Manickam, R.,** Lee, Y. H., & Surareungchai, W. (2015). Electrochemical genosensor assay using lyophilized gold nanoparticles/latex microsphere label for detection of *Vibrio cholerae.* **Talanta**, 139, 167–173. doi:10.1016/j.talanta.2015.02.054
On-going Research	As below
Completed Research	As below
Research Grants	**Research Grants**

No	Funding body	Title	Role	Duration	Value (RM)
1.	FRGS/1/2020/STG01/AIMST/01/1	Synthesis and evaluation of Novel Chromone Analogues potential against Corona Virus	Investigator	2020-2023	150,200
2.	LRGS 2015-1	Mechanisms and principles of control via putative prophylactics,	Co-Investigator	2015-2021	2,398,800.00

		therapeutics and diagnostics against latent & MDR-TB infection			
3.	FRGS-2018-1	Evaluation of Prototype Cold Chain Free Live Attenuated Oral Cholera Vaccine for its Cross-Protective Immunity against Enterotoxigenic Escherichia Coli (ETEC) as a Dual-Use Vaccine for Diarrheal disease	Co-Investigator	2018-2020	185,200.00
4.	FRGS-2018-1	Discovery of novel benzamidine analogues based silver nanoformulation for treatment of periodontitis due to P. gingivalis: A study that encompasses molecular docking, 3D-QSAR analysis, synthesis and silver nano-formulation of benzamidine analogues accompanied by toxicity analysis, in-vitro and in-vivo (egg model) evaluation against gingipain.	Co-Investigator	2018-2021	140,800.00

Consultancy	Have done in the area of Molecular Diagnostics
Awards	50 Awards for academic and Research excellence
Professional Membership	1. Malaysian Society of Parasitology and Tropical Medicine, Member, since 1998 2. Malaysian Society for Molecular Biology and Biotechnology, Member since 2002 3. Malaysian Microbiology Society, Member since 2003
Supervision	MSc/PhD Post graduates students: Current - 10, Completed - 45
Teaching	Genetic Engineering Molecular Pathogenesis Virology Research Methodology

	Bioinformatics Self Reliance and Social Responsibility MSc Biotechnology by Research PhD Biotechnology by Research
Areas of Expertise	Genetic engineering, Genome engineering Cholera vaccine Molecular diagnostics Biosensors Bacteriophages Barcoding bacteria, fungi and termites
Contact Details	ravichandran@aimst.edu.my Tel: 04 4298113