

Curriculum Vitae

Dr. Dettachai Ketpun

Walailak University	Tel.	075-476-027
Akkraratchakumari Veterinary College	Fax	-
222 Thaiburi, Thasala District Nakhonsithammarat	Email	dettachai.ke@wu.ac.th
80160 Thailand		

1. Educational Background

Level	Program/Educational institution	Year of Graduation
Ph.D.	Veterinary Bioscience (Cytopathology and Microfluidics), Faculty of Veterinary Science, Chulalongkorn University	2016
M.Sc.	Veterinary Pathobiology (Pathobiology) Faculty of Veterinary Science, Chulalongkorn University	2012
D.V.M.	Veterinary Medicine Faculty of Veterinary Medicine, Kasetsart University	1995

2. Work Experience in reverse chronological order (the Present or most recent position first)

Position & institution	Year
Lecturer of Veterinary Pathology Akkraratchakumari Veterinary College, Walailak University	2020 on
Postdoctoral Research Fellow of Tissue Engineering Faculty of Engineering, Chulalongkorn University	2019
Research fellow of “3D-Bioprinting of vascularized human dermis” Project (A*Star and P&G Collaboration), Tissue Engineering and Biological Laboratory, School of Mechanical and Aerospace Engineering, Nanyang Technological University, Singapore	2016-2019
Visiting International Research Student The University of British Columbia, Canada	2015

3. Expertise

- 1) Cytopathology
- 2) Biology of cancer stem cells and embryonic stem cells
- 3) Tissue engineering for regenerative medicine and diseases modelling
- 4) 3D-Mammalian cell and 3D-tissue slice culture
- 5) Microfluidic single cell analysis
- 6) 3D-Bioprinting
- 7) Organ-on-a-Chip and Tissue-on-a-Chip

4. Teaching Experience

YES

NO

Institution	Faculty	Program	Course	Year
(Walailak University)	Akkhraratchakumari Veterinary College	Doctor of Veterinary Medicine	1. Veterinary General Pathology 2. Veterinary Systemic Pathology 3. Veterinary Clinical Pathology 4. Basic Practical Skill 3 5. Basic Practical Skill 4 6. Basic Practical Skill 5 7. Clinical Practice in Veterinary Diagnostic Medicine 8. Professional Practice in Veterinary Diagnostic Unit and Pathology 9. Small Animal Medicine I (Oncology) 10. Small Animal Medicine II (Oncology)	2020 on
Nanyang Technological University, Singapore	School of Mechanical and Aerospace Engineering	Mechanical Engineering	Final Year Project	2018
Western University	Faculty	Doctor	Veterinary General Pathology	2016-2017

Institution	Faculty	Program	Course	Year
	of Veterinary Medicine	of Veterinary Medicine	Veterinary Systemic Pathology Veterinary Clinical Pathology Veterinary Parasitology I Veterinary Parasitology II	
Western University	Faculty of Veterinary Medicine	Doctor of Veterinary Medicine	Veterinary General Pathology Veterinary Systemic Pathology	2014-2015

5. Academic Achievement for 5 years ago

5.1 Research article

- 1) Attawut Thanormsridetchai. **Dettachai Ketpun**. Werayut Srituravanich. Prapruddee Piyaviriyakul. Achariya Sailasuta. Wutthinan Jeamsaksiri. Witsaroot Sripumkhai and Alongkorn Pimpin. 2017. Focusing and sorting of multiple-sized beads and cells using low-aspect-ratio spiral microchannels. *Journal of Mechanical Science and Technology*. 31(11): 5397-5405. DOI 10.1007/s12206-017-1034-z.
- 2) **Dettachai Ketpun**. Achariya Sailasuta. Thammawit Suwannaphan. Sudchaya Bhanpattanakul. Alongkorn Pimpin. Werayut Srituravanich. Witsaroot Sripumkhai. Wutthinan Jeamsaksiri and Prapruddee Piyaviriyakul. 2018. The Viability of Single Cancer Cells after Exposure to Hydrodynamic Shear Stresses in a Spiral Microchannel: A Canine Cutaneous Mast Cell Tumor Model. *Micromachines* 9(9). DOI: 10.3390/mi9010009.
- 3) Sriphutkiat Y., Kasetsirikul S., **Ketpun D.** and Zhou Y. 2019. Cell Alignment and Accumulation using Acoustic Nozzle for 3D printing. *Scientific Reports* 9, 17774 (2019). doi:10.1038/s41598-019-54330-8.
- 4) **Dettachai Ketpun**, Alongkorn Pimpin, Tewan Tongmanee, Prapruddee Piyaviriyakul, Weerayut Srituravanich, Sudchaya Bhanpattanakul, Witsaroot Sripumkhai, Wutthinan Jeamsaksiri, Achariya Sailasuta. 2019. A Potential Application of Triangular Microwells to Entrap Single Canine Cutaneous Mast Cell Tumor Cells. *Micromachines* 10(12), 841. <https://doi.org/10.3390/mi10120841>.
- 5) Surasak Kasetsirikul, **Dettachai Ketpun**, Yannapol Sriphutkiat and Yufeng Zhou. 2020. Effective Vascularization on Micropatterned GelMA Produced by Heating -

5.2 Research article/ academic article presented in conferences

- 1) S. Meesuwan. A. Sailasuta. K. Rattanapinyapituk. P. heerwasutrakul. **D. Ketpun.** A. Kaneungthong. P. Piyaviriyakul. Co-expression of Oct-4, Nanog and Sox-2 in Canine Cutaneous Mast Cell Tumor Determined by RT-qPCR. Proceeding of the 15th Chulalongkorn University Veterinary Conference (CUVC) 2016: Research in practice. 20-22 April 2016. Bangkok. Thailand (Regional). p. 409-410.
- 2) **D. Ketpun.** T. Suwannaphan. S. Bhanpattanakul. A. Sailasuta. P. Piyaviriyakul. A. Pimpin. W. Srituravanich. W. Sripumkhai and W. Jeamsaksiri. The effect of extensional fluid stress (EFS) on mechanical morphology of single canine cutaneous mast cell tumor (MCT) cells after passively inertial sorting through an Archimedean Spiral Microchannel. Proceeding of the 8th LOC-Microfluidics & Microarrays World Conference 2016, 26-28 September 2016, San Diego Marriot Mission Valley, San Diego, USA (International).
- 3) A. Sailasuta. P. Piyaviriyakul. T. Kaewamatawong. P. Theewasutrakul. **D. Ketpun.** S. Bhanpattanakul. A. Pimpin. W. Srituravanich. T. Tongmanee. A. Thanomsridetchai. T. Suwannaphan. W. Jeamsaksiri. W. Sripumkhai. J. Juntawong. J. Supadech. W. Bunjongpru. M. Chanasakulniyom. Innovation on Microfluidics-based device in Single Cell Analysis of Canine Round Cell Tumors. Proceeding of the 16th Chulalongkorn University Veterinary Conference (CUVC) 2017. 22-24 Mar 2017. Bangkok. Thailand (Regional). p. S61-S62.
- 4) S. Bhanpattanakul, A. Sailasuta, P. Piyaviriyakul, T. Kaewamatawong, P. Theewasutrakul, **D. Ketpun,** A. Pimpin, W. Srituravanich, T. Tongmanee, T. Suwannaphan, W. Jeamsaksiri. W. Sripumkhai. P. Pattamang. M. Chanasakulniyom. In-house Polydimethylsiloxane Microfluidic Device on Single-cell trapping and culturing of Leukemia cell line: cellular study and analysis. Proceeding of the 9th Asia-Pacific Conference of Transducers and Micro-Nano Technology (APCOT) 2018. 24-27 June 2018, Hong Kong University of Science and Technology, Hong Kong (International).
- 5) Thammawit Suwannaphan, Alongkorn Pimpin, Achariya Sailasuta, Prapruddee Piyaviriyakul, Sudchaya Bhanpattanakul, **Dettachai Ketpun** and Wutthinan Jeamsaksiri. Effects of Extensional and Shear Stresses on Cells-The Case Study of White Blood Cells in A Setup of Spiral Microchannels. Proceeding of the 9th Asia-

Pacific Conference of Transducers and Micro-Nano Technology (APCOT) 2018. 24-27 June 2018, Hong Kong University of Science and Technology, Hong Kong (International).

6) Sriphutkiat Y., Kasetsirikul, S., **Ketpun D.** and Zhou Y. Cells alignment and accumulation using acoustic nozzle for 3D printing, Proceedings of the 3rd International Conference on Progress in Additive Manufacturing (Pro-AM) 2018. Nanyang Executive Centre, Nanyang Technological University, Singapore (International).

7) Kasetsirikul S., Sriphutkiat Y., **Ketpun D.** and Zhou Y. Skin samples preparation using 3D bioprinting technology, Proceeding of the RSU International Research Conference 2019, Rangsit University, Patumthani, Thailand (International).

6. Award and honor

Award and honor	Year
N/A	N/A