

The 42<sup>nd</sup> Annual Conference of the Anatomy Association of Thailand (AAT42)

BP Samila Beach Hotel & Resort, Songkhla, Thailand

May 22<sup>nd</sup> – 24<sup>th</sup>, 2019

Wednesday May 22 <sup>nd</sup> , 2019	
08.00 – 09.00	<b>Registration</b>
09.00 – 09.30	<p><b>Opening Ceremony</b> (Samila 1)</p> <p>Welcome Address - <a href="#">Assoc. Prof. Kowit Chaisiwamongkol, M.D.</a> President, Anatomy Association of Thailand</p> <p>Report Address - <a href="#">Asst. Prof. Uraporn Vongvatcharanon, Ph.D.</a> Chair of the AAT42 Organizing Committee, Prince of Songkla University</p> <p>Opening Address - <a href="#">Assoc. Prof. Ladda Eksomtramage</a> Acting Dean of Faculty of Sciences, Prince of Songkla University</p> <p>Sponsor / Exhibitor Appreciation</p> <p>Group Photo</p>
9.30 – 10.10	<p><b>Key Note Lecture</b> (Samila 1)</p> <p>Chair-persons: <a href="#">Prof. Emeritus Yindee Kitiyanant D.V.M., M.Sc.</a> <a href="#">Asst. Prof. Uraporn Vongvatcharanon, Ph.D.</a></p> <p><i>“Solving clinical problems with anatomical solutions”</i></p> <p><a href="#">Prof. Tracey Wilkinson, Ph.D.</a> Centre for Anatomy &amp; Human Identification, School of Science &amp; Engineering, University of Dundee</p>
10.10 – 11.30	<p><b>Plenary Lecture I &amp; II</b> (Samila 1)</p> <p>Chair-persons: <a href="#">Prof. Emeritus Sukumal Chongthammakun, Ph.D.</a> <a href="#">Assoc. Prof. Nisaudah Radenahmad, Ph.D.</a></p> <p><b>Plenary Lecture I</b></p> <p>10.10 - 10.50 <i>“Seeking treatment for Alzheimer’s Disease from the nature”</i> <a href="#">Prof. Ingrid Liu, Ph.D.</a> Institute of Medical Sciences, Tzu Chi University, Taiwan</p> <p><b>Plenary Lecture II</b></p> <p>10.50 – 11.30 <i>“Role of the prefrontal cortex in pain processing”</i> <a href="#">Prof. Wei Yi Ong, Ph.D.</a> Department of Anatomy, Yong Loo Lin School of Medicine, National University of Singapore</p>
11.30 – 12.00	<p>O-PTIR, achieving sub-micron IR spatial resolution, fast and easy way (Samila 1)</p> <p><i>Hi-Tech Imaging</i></p>
12.00 – 13.00	Lunch (Songkla A)
13.00 – 13.30	<p>New biomarkers for detecting urinary calculi (Samila 1)</p> <p><i>BioSystem</i></p>
13.30 – 15.15	<p><b>Oral Presentation Session I &amp; II</b> (Samila 1)</p> <p>Chair-persons: <a href="#">Assoc. Prof. Kulathida Chaithirayanon, Ph.D.</a> <a href="#">Asst. Prof. Supita Tanasawet, Ph.D.</a></p> <p><b>Oral Presentation Session I</b></p> <p><i>Neuroscience:</i></p> <p>O-01: <i>“The protective effects of germinated brown rice on glutamate toxicity in HT22 cells and vascular cognitive impairment in mice”</i></p>

	<p><a href="#">Eve Mon Oo</a>, Farhana Padungraksart, Chairat Turbpaiboon, Panapat Uawithya, Vipavadee Chaisuksunt, Supin Chompoopong</p> <p>O-02: <i>“Chrysin attenuated reductions of memory and cell proliferation in the subgranular zone of hippocampal dentate gyrus caused by D-galactose induced aging in rats”</i></p> <p><a href="#">Ram Prajit</a>, Nataya Sritawan, Kornrawee Suwannakot, Salinee Naewla, Anusara Aranarochana, Apiwat Sirichoat, Wanassanan Pannangrong, Jariya Umka Welbat</p> <p>O-03: <i>“Metformin prevents memory deficits and reductions in cell proliferation induced by methotrexate chemotherapy in adult rats”</i></p> <p><a href="#">Nataya Sritawan</a>, Ram Prajit, Kornrawee Suwannakot, Salinee Naewla, Anusara Aranarochana, Apiwat Sirichoat, Wanassanan Pannangrong, Jariya Umka Welbat</p> <p>O-04: <i>“Effects of Nelumbo nucifera stamen extract on recognition memory and oxidative stress in amyloid-<math>\beta</math> induced rats”</i></p> <p><a href="#">Jenjiralai Phanphak</a>, Chantana Boonyarat, Jariya Umka Welbat, Komsun Bunreungthong, Nutchareeporn Nillert, Wanassanun Pannangrong</p> <p>O-05: <i>“Effect of Clausena harmandiana extract on cognitive dysfunction and oxidative stress in amyloid-<math>\beta</math> induced rats”</i></p> <p><a href="#">Nutchareeporn Nillert</a>, Chantana Boonyarat, Jariya Umka Welbat, Jenjiralai Phanphak, Komsun Bunreungthong, Wanassanun Pannangrong</p> <p>O-06: <i>“Effect of Antidesma ghaesembilla extracts on oxidative stress and memory impairment induced by amyloid-<math>\beta</math> in rat”</i></p> <p><a href="#">Komsun Bunreungthong</a>, Chantana Boonyarat, Jariya Umka Welbat, Nutchareeporn Nillert, Jenjiralai Phanphak, Wanassanun Pannangrong</p> <p><a href="#">Oral Presentation Session II</a> <i>Gross Anatomy and Histology:</i></p> <p>O-07 : <i>“Reduction of ARID1A protein in renal cell carcinomas”</i></p> <p><a href="#">Keerakarn Somsuan</a>, Ratirath Samon, Rachanee chanasong, Yupa Srithongchai, Pattaraporn Sonthi, Natthiya Sakulsak</p>
14.30 – 16.00	<p><a href="#">Poster Presentation Session</a></p> <p>Chair-persons: <a href="#">Prof. Sithiporn Agthong, MD., Ph.D.</a> <a href="#">Asst. Prof. Worawit Suphamungmee, Ph.D.</a></p>
16.00 – 17.00	2019 Annual General Meeting of the Anatomy Association of Thailand (Fueng Fah)
18.30 – 22.00	<a href="#">Welcome Reception</a> (Samila 1)
<b>Thursday May 23<sup>rd</sup>, 2019</b>	
09.00 – 09.40	<p><a href="#">Key Note Lecture:</a> (Samila 1)</p> <p>Chair-persons: <a href="#">Assoc. Prof. Supin Chompoopong, Ph.D.</a> <a href="#">Assoc. Prof. Sutisa Thanoi, Ph.D.</a></p> <p><i>“Brain research of kratom medicinal plant”</i></p>

	<p><a href="#">Assoc. Prof. Ekkasit Kumarnsit, Ph.D.</a> Faculty of Science, Prince of Songkla University, Thailand</p>
9.40 – 10.20	<p>Plenary Lecture III (Samila 1) <i>“Targeting Nrf2 signaling in ischemic optic neuropathy”</i> <a href="#">Assoc. Prof. Shun-Ping Huang, M.D., Ph.D.</a> Department of Molecular Biology and Human Genetics, Tzu Chi University, Taiwan</p>
10.20 – 11.00	<p>Plenary Lecture IV (Samila 1) <i>“Sphingosine 1-phosphate signaling in the dorsal root ganglion modulates chemotherapy-induced neuropathy”</i> <a href="#">Asst. Prof. Deron R. Herr, Ph.D.</a> Department of Pharmacology, Yong Loo Lin School of Medicine, National University of Singapore</p>
11.00 – 11.30	<p>Special Lecture (Samila 1) Chair-persons: <a href="#">Assoc.Prof. Wattana Weerachayanukul, Ph.D.</a> <a href="#">Assoc.Prof. Samur Thanoi, Ph.D.</a> <i>“Developing an approach to identify silver-responsive gene: in silico analysis by connection up- and down-regulation expression analysis of microarrays (CUDREAM)”</i> <a href="#">Asst. Prof. Amornpun Sereemasun, M.D., Ph.D.</a> Department of Anatomy, Faculty of Medicine, Chulalongkorn University</p>
11.30 – 13.00	Lunch (Songkla A)
13.00 – 15.00	<p>Anatomy Teaching Symposium (Samila 1) Chair-persons: <a href="#">Prof. Emeritus Meechai Srisai, M.D., Ph.D.</a> <a href="#">Dr. Pisit Poltana, Ph.D.</a> <i>“Fifty-three years experiences in teaching anatomy”</i> <a href="#">Prof. Emeritus Meechai Srisai, M.D., Ph.D.</a> Department of Anatomy, Faculty of Medicine, Chulalongkorn University, Thailand</p> <p><a href="#">Oral Presentation Session III</a></p> <p>O-08: <i>“The significant of anatomy and physiology subject toward learning theory, clinical practice, and preparing for professional nursing and midwifery licensure examination of nursing student”</i> <a href="#">Pisit Poltana</a>, <a href="#">Napadon Leaudnakrob</a>, <a href="#">Paradorn Yingyoud</a>, <a href="#">CDR Supranee Pholtana</a>, <a href="#">I Made Sundayana</a>, <a href="#">I Dewa Ayu Rismayanti</a></p> <p>O-09: <i>“New technique in cadaveric angiography use to improve medical student teaching”</i> <a href="#">Kittipich Sangkamard</a>, <a href="#">Parkpoom Piyaman</a>, <a href="#">Thanaporn oonjitti</a>, <a href="#">Rosarin Ratanalekha</a></p> <p>O-10: <i>“The three-dimensional reconstruction of pig embryo: from serial microscopic sections to interactive virtual model for education in embryology”</i> <a href="#">Phattarapong Predapramote</a>, <a href="#">Thanaporn Oonjitti</a>, <a href="#">Pirash Saiviroonporn</a>, <a href="#">Rosarin Ratanalekha</a></p> <p>O-11: <i>“Anatomy for all: how good are wikipedia anatomy entries?”</i> <a href="#">Athikhun Suwannakhan</a>, <a href="#">Laphatrada Yurasakpong</a>, <a href="#">Taweetham Limpanuparb</a>, <a href="#">Krai Meemon</a>, <a href="#">Sirorat Janta</a></p>

15.00 – 16.00	Poster presentation / Coffee break
16.00 – 17.00	<u>Award Winner Announcement</u> (Samila 1)
18.00 – 20.00	Dinner (Samila 1)
Friday May 24 <sup>th</sup> , 2019	
09.00 – 12.00	Poster Presentation
12.00 – 13.00	Lunch Break

\* Coffee/tea/refreshments will be served at 10 a.m. and 3 p.m.

## Poster Presentation:

- P-01: Effect of methamphetamine administration on alterations of Gria1 promoter methylation and gene expression in rat brain  
Sri-arun Jamjan, Samur Thanoi, Helene Fachim, Caroline F Dalton, Gavin P Reynolds, Sutisa Nudmamud-Thanoi
- P-02: Metformin prevents MPP<sup>+</sup>-induced cell death in a cellular model of Parkinson's disease  
Chureerat Norradee, Permphan Dhamasaroja
- P-03: Induced pluripotent stem cells as an alternative resource for cell therapy in degenerative and regenerative medicine  
Narawadee Choompoo, Claire M. Kelly, Anne E. Rosser
- P-04: Effects of *Holothuria scabra* extract on tumor necrosis factor alpha, cyclooxygenase-2 and cytosolic phospholipase A2 expression in *P. yoelii* infected mice.  
Lanaprai Kwathai, Pornyupa Sanguanwong, Panapat Jawithya, Ingrid Y. Liu, Prasert Sobhon, Supin Chompoopong
- P-07: Neuroprotective effects of n-butylidenephthalide in neurodegeneration after optic nerve crush in rats  
Jia-Ying Chien, Yu-Yan Chou, Shun-Ping Huang
- P-08: Efficiency of gymnemic acid for vascular protective effect on angiotensin-1 in diabetic rat brain  
Nichawadee Sandech, Rawipa Jangchart, Manaras Komolkriengkrai, Piyakorn Boonyoung, Uraporn Vongvatcharanon, Wipapan Khimmaktong
- P-09: *Thunbergia laurifolia* Lindl. extract maintains the striatal dendritic spines in mouse models of Parkinson's disease  
Chanida Thongsopha, Thanasit Chaiwut, Pornnarez Thaweekhotr, Ranida Quiggins
- P-11: Association of GABA-related molecules with autistic-like behavior of the *Cav3.2* knockout mice  
Shao-Feng Liang, Ming-Yang, Supin Chompoopong, Ingrid Y. Liu
- P-12: The effect of compound E411 reverses memory retrieval deficit in triple-transgenic Alzheimer's disease mice via suppressing neuroinflammation response  
Peeraporn Varinthra, Kiruthika Ganesan, Shun-Ping Huang, Supin Chompoopong, Ingrid Y. Liu
- P-13: Anti-Parkinson effect of metformin in *C. elegans* model of Parkinson's disease  
Nada Saewanee, Theethawat Praputpittaya, Nawaphat Malaiwong, Pawanrat Chalorak, Krai Meemon
- P-14: The effect of eEF1A2 knockdown on neuronal differentiation of SH-SY5Y cells  
Kanitin Rumpansuwon, Permphan Dhamasaroja
- P-15: Elevation of 5-lipoxygenase and matrix metalloproteinase-1 in meningioma  
Ruenruthai Kaeopu, Wuttipong Tirakotai, Kulathida Chaithirayanon, Nathawut Sibmooh, Pornpun Vivithanaporn
- P-16: Fluorescence *in situ* hybridization cut-off values for detecting chromosome 7 abnormalities in MDS patients  
Suphitcha Phrommin, Adisak Tantiworawit, Thanawat Rattanathammethee, Chaniporn Puaninta, Nathaporn Pangjaidee, Sirinda Aungsuchawan, Kanokkan Bumroongkit
- P-17: IgA plays a role in the protection of piglets against porcine epidemic diarrhea virus  
Prapassorn Boonsoongnern, Vanhnaly Dala, Alongkot Boonsoongnern
- P-18: Lipid-lowering effects of *Kaempferia parviflora* in hypercholesterolemic rats  
Somsuda Somintara, Choowadee Pariwatthanakun, Bungorn Sripanidkulchai, Kittisak Sripanidkulchai
- P-19: The effect of *Areca catechu* L. extract on motility of *Opisthorchis viverrini*  
Jarawee wannachart, Kamonrot Kumpangnil, Nongnuch Kanharat, Ratana Leksomboon
- P-20: Effect of Naproxen on proliferation of cholangiocarcinoma cell line  
Kamonrot Kumpangnil, Jarawee Wannachart, Kanjana Pangjit, Latiporn Udomsuk, Ratana Leksomboon
- P-21: Effects of pentacyclic triterpene natural product on prostate cancer cell metastasis  
Sirorat Janta, Somjai Apisawetakan, Saksit Nobsathian, Kulathida Chaithirayanon<sup>†</sup>
- P-22: Isoliquiritigenin slows MDCK cyst enlargement by inhibiting chloride secretion and suppressing ERK1/2 signaling pathway

Peerachat Veeraphan, Suwaporn Deandee, Chaowalit Yuajit

- P-23: Anti-proliferation effect of *Gonithalamis* species plant extract against triple-negative breast cancer cells**  
Laphatrada Yurasakpong, Achiraya Kittiboonya, Sirorat Janta, Akkarapol Butsuri, Somjai Apisawetakan, Kulathida Chaithirayanon
- P-24: Molting female pheromone-like substances boost *IAG* expression in androgenic gland of male giant freshwater prawn, *Macrobrachium rosenbergii*, possibly through olfactory-CNS-gonadal axis**  
Lamai Chaichandee, Thanapong Kruangkum, Jirawat Saetan, Sirorat Thongrod, Pakpoom Thintharua, Rapeepun Vanichviriyakit, Charoonroj Chotwiwatthanakun, Prasert Sobhon
- P-25: *Spiroplasma eriocheiris* infection in hematopoietic tissue of *Macrobrachium rosenbergii***  
Arnon Pudgerd, Charoonroj Chotwiwatthanakun, Thanapong Kruangkum, Kallaya Sritunyalucksana, Rapeepun Vanichviriyakit
- P-26: Immuno-based detection of capsid protein of infectious hypodermal and hematopoietic necrosis virus (IHHNV) as a diagnostic tool in penaeid shrimp**  
Supapong Imsonpang, Arnon Pudgerd, Thanapong Kruangkum, Kallaya Sritunyalucksana, Charoonroj Chotwiwatthanakun, Rapeepun Vanichviriyakit
- P-27: Cloning and expression of farnesoic acid O-methyltransferase gene in mandibular organ of *Penaeus monodon***  
Wanida Santimanawong, Wanita Semchuchot, Rapeepun Vanichviriyakit, Thanapong Kruangkum, Charoonroj Chotwiwatthanakun
- P-28: Nacreous proteins in *Haliotis diversicolor* and its possible role in biomineralization**  
Valainipha Habuddha, Tiranana Buddawong, Chanyatip Suwannasing, Monsicha Somrit, Atthaboon Watthammawut, Thanyaporn Senarai, Wattana Weerachayanukul, Somluk Asuvapongpatana
- P-29: Expression of ionotropic receptor 25a in three different phenotypes of male *Macrobrachium rosenbergii***  
Natwalee Jaikunta, Thanapong Kruangkum, Charoonroj Chotwiwatthanakun, Rapeepun Vanichviriyakit
- P-30: Apoptosis induction of butanol extract from sea cucumber, *Holothuria atra*, on glioblastoma cell line**  
Kanta Pranweerapaiboon, Kant Sangpaiboon, Pornpun Vivithanaporn, Somjai Apisawetakan, Kulathida Chaithirayanon
- P-31: The detection of *atzA* gene for atrazine degradation in *Trichoderma* spp.**  
Gun Anantasomboon, Porncham Saitongdee
- P-32: *Aquilaria crassna* leaves extract decreases tubular atrophy in an early stage of diabetic nephropathy rats**  
Pinyada Pho-on, Rachanee Chanasong, Karnyarat Khombang, Nitchakan Pimwongthong, Sangkab Sudsaward, Natthiya Sakulsak, Krongkan Chootip, Sasiprapa Khunchai
- P-33: Morphological studies of pancreatic islets of prediabetes rats treated with coffee pulp extracts**  
Phannavich Malawan, Chutima Srimaroeng, Vipavadee Chaisuksunt, Manussabhorn Phatsara
- P-34: The recovery effect of pre-germinated brown rice on histopathology of rat kidney induced by dextromethorphan**  
Thiraphon Deethaisong, Siriluk Veerasakul, Sutisa Nudmamud-Thanoi, Samur Thanoi, Suphawatt Saiphanit, Ittipon Phoungetchara
- P-35: The effect of *Aquilaria crassna* crude extract on the histology of submandibular gland in rats with STZ – induced DM**  
Yupa Srithongchai, Atcharaporn Chpong, Kuanjira Sittiprom, Keerakarn Somsuan, Rachanee Chanasong, Natthiya Sakulsak
- P-36: Study of gymnemic acid efficiency for vascular restoration on vascular endothelial growth factor (VEGF) in diabetic rat kidney**  
Rawipa Jangchart, Nichawadee Sandech, Manaras Komolkriengkrai, Piyakorn Boonyoung, Uraporn Vongvatcharanon, Wipapan Khimmaktong
- P-37: Diagnostic immunohistochemistry of p40 in human non-keratinizing nasopharyngeal carcinoma**  
Chinnawut Suriyongplengsaeng, Pannawat Trerattanavong, Worawit Suphamungmee

- P-38: Histological and functional changes in the liver and kidney of streptozotocin-induced diabetic rats after treatment by Patavee Apo Wayo extract  
Jariya Umka Welbat, Bungorn Sripanidkulchai, Niramai Fangkrathok, Nutchareeporn Nillert, Jenjiralai Phanphak, Komsun Bunreungthong, Monthaka Teerachaisakul, Wanassanun Pannangrong
- P-39: Ameliorative effects of *Aquilaria crassna* leaves extract on histomorphological changes of STZ- induced diabetic testicular injury in rats  
 Chanathip Taengoon, Thanaporn Piraban, Narawadee Choompoo, Natthiya Sakulsak, Krongkarn Chootip, Rachanee Chanasong
- P-40: Anatomical variation of lateral cutaneous nerve of thigh on the inguinal ligament and clinical implications  
Perada Kantakam, Prangmalee Leurcharusmee, Apichat Sinthubua, Pasuk Mahakkanukrauh
- P-41: Morphometric method of os coxae for sex determination in a Thai population  
 Pittayarat Intasuwan, Disaya Chudasri, Apichat Sinthubua, Pasuk Mahakkanukrauh
- P-42: Morphometric method for sex determination using the first lumbar vertebra in a Thai population  
Yanumart Malatong, Disaya Chudasri, Apichat Sinthubua, Pasuk Mahakkanukrauh
- P-43: Anatomical study of suprascapular nerve and phrenic nerve in supraclavicular fossa with clinical Application  
Naraporn Maikong, Prangmalee Leurcharusmee, Apichat Sinthubua, Pasuk Mahakkanukrauh
- P-44: The anatomical landmarks for locating the course of the temporal vessels to evade the complications following temporal augmentation  
Worapat Sawatwong, Tanvaa Tansatit, Thirawass Phumyoo, Benrita Jitree, Chalermquan Rungsawang
- P-45: The pedicle with double foramen transversarium is important for cervical spine surgery  
Kimaporn Khamanarong, Jarupon Mahiphot, Surachai Sae-Jung
- P-46: Carotid bifurcation in relation to the vertebral level: an angiographic study  
Sukrit Sangkhano, Pattama Amarttayakong, Wiphawi Hipkaeo, Arada Chaiyamoom, Waranon Munkong
- P-47: An angiographic study of high carotid bifurcation related to angle of mandible  
Pattama Amarttayakong, Worawut Woraputtaporn, Kowit Chaisiwamongkol, Waranon Munkong, Sukrit Sangkhano
- P-48: Anatomical evidence of cerebral hemorrhage in Chiang Mai, Thailand  
Pornnarez Thaweekhotr, Ranida Quiggins
- P-49: Correlation of the popliteal hiatus and lateral meniscus of the knee  
 Thanatorn Jarupongsiri, Chalermchai Limitlaohaphan, Chusak Kijkunasatian, Porncham Saitongdee
- P-50: Prevalence and factors associated with low back pain among military personnel deployed for the peace building process in the three Southern border provinces of Thailand  
Chareef Patthanapreechawong, Panus Kuan-akewinyo, Anuntasuk Cheevakul, Phnom Sukchan, Kolip Payanglee
- P-51: The osteoporosis status of officer who has vulnerable of Ubon Ratchathani University and the elderly surrounding communities  
Ratana Leksomboon, Nongnuch Kanharat, Suriyong Pleung-ngam, Kitti Laosupap, Kingkarn Chumueang
- P-52: The Use of iPad for radiologic image display in anatomy spot test  
 Kantapong Rungvararat, Tanat Tabtieang
- P-53: Learning outcomes of active based strategy in locomotor anatomy course  
Tulaporn Wongtawatchai, Chittipong Tipbunjong, Jongdee Nopparat, Supita Tanasawet, Jirawat Saetan
- P-54: Whole body newborn angiography corrosion casting in medical education by polymethylmethacrylate  
Thanaphorn Oonjitti, Parkpoom Piyaman, Kittipich Sangkamard, Rosarin Ratanalekha
- P-55: Satisfaction of innovative design prototype training manikins of CPR compression by measuring force vector  
 Nartnutda Morakotsriwan, Kittiya Nakphan, Saipin Chaiyanan, Wiroj Khawlaor, Sitthipan Chaiyanan
- P-56: Team-based learning (TBL) in the neuroanatomy teaching  
 Rachanee Chanasong, Narawadee Choompoo, Chakriya Promsuban, Sangkub Sudsawad, Khanittha Srimuangwong, Sasiprapa Khunchai, Watcharee Tiangyou, Poonikha Namvongsakool, Natthiya Sakulsak

P-57: Safety for laparoscopic abdominal surgery with reference to inferior epigastric artery in Thai cadavers

Sirinad Tankruad, Pannawat Trerattanavong, Chinnawut Suriyonplengsaeng, Worawit Suphamungmee

P-58: Comparison of virtual microscopy and conventional microscopy in medical education

Manaras Komolkriengkraj, Uraporn Vongwatcharanon, Pinij Thaweethamseewee, Wipapan Khimmaktong

Note: P-05, P-06, and P-10 have been changed to be O-04, O-05, O-06, respectively.