

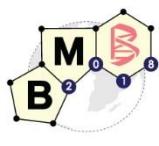
The 6th International Conference on Biochemistry and Molecular Biology



Content

S1 Medical Biochemistry and Aging Science

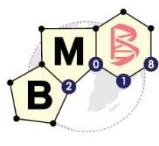
- S1-O-04 **Antifungal activity of natural extract isolated from fungal *Xylaria* sp. BCC1067 against drug resistance**
Kwanrutai Watchaputi, Nitnipa Soontorngun
- S1-O-07 **Utilization of lectin capture strategy combined with label-free quantitative proteomics analysis reveals differential expression levels of glycoproteins from metastatic colorectal cancer patients**
Juthamard Chantaraamporn, Daranee Chokchaichamnankit, Naiyarat Prasongsook, Chantragan Srisomsap, Jisnuson Svasti, Voraratt Champattanachai
- S1-O-08 **Antifungal activity of *Xylaria* sp. extract and synergistic effect in combination with antifungal drug caspofungin againsts model yeast *Saccharomyces cerevisiae***
Pichayada Somboon, Nitnipa Soontorngun
- S1-O-09 **Gel-based proteomics analysis of starving mouse pancreatic beta-cell insulinoma (MIN6) prior to glucose stimulation**
Thanadol Sutantiwanichkul, Sucheewin Krobthong, Phongthon Kanjanasirirat, Chatchai Muanprasart, Sittiruk Roytrakul
- S1-O-10 **Coffee pulp ethanolic extract ameliorates palmitic acid-induced inflammation in RAW 264.7 macrophage and insulin resistance in 3T3-L1 adipocyte**
Pensiri Buacheen, Pornsiri Pitchakarn, Ariyaphong Wongnoppavich, Arisa Imsumran Bonness
- S1-P-01 **A bibenzyl from *Dendrobium ellipsophyllum* mediates apoptosis in human lung cancer cells via modulation on cellular reactive oxygen species**
Anirut Hlosrichok, Boonchoo Sritularak, Pithi Chanvorachote, Chatchai Chaotham
- S1-P-02 **The effect of oxidative stress on breast cancer multicellular spheroids**
Anunyaporn Phungsom, Pichamon Kiatwuthinon
- S1-P-04 **Effects of mangiferin on cell proliferation and alkaline phosphatase activity of human fetal osteoblast cell line**
Budsaraporn Boonsuth, Nopporn Thasana, Waraporn Kasekarn
- S1-P-05 **Breath acetone sensor for monitoring ketosis based on polyaniline and silver nanoparticles/polyaniline composite**
Chalisa Chairanit, Tanthip Eamsa-ard, Teerakiat Kerdcharoen, Rina Patramanon



The 6th International Conference on Biochemistry and Molecular Biology



- S1-P-11 **Extraction of antimicrobial compounds from soil *Actinomycetes* strain smc256 against nosocomial pathogen**
Chinnawat Siriboonwong, Manee Chanama, Suchart Chanama
- S1-P-13 **Recombinant bacterial-protein Colicin N causes cytotoxicity and oxidative stress in human lung cancer cells**
Gea E coy, Chatchai Chaotham, Maneewan Suksomtip, Pithi Chanchavarote, Wanatchaporn Arunmanee
- S1-P-18 **Anti-invasion activity of *trans*-4-methoxy-cinnamaldehyde (4-MCA) in cervical cancer cells**
Kritsada Jaisamak, Panata Iawsipo, Mathurose Ponglikitmongkol
- S1-P-22 **Characterization of modified crocodile (*Crocodylus siamensis*) hemoglobin using bis(3,5-dibromosalicyl) fumarate**
Napaporn Roamcharern, Wisarut Payoungkiattikun, Nisachon Jangpromma, Sompong Klaynongsruang
- S1-P-23 **Investigation of mTOR complex 2 and tau interaction by affinity purification mass spectrometry**
Narawit Pacharakullanon, Piriya Wongkongkathep, Wannapan Poolex, Naphat Chantaravisoot
- S1-P-24 **Breast cancer detection in mice by *Helix pomatia* agglutinin lectin**
Nipattha Srioun, Nisa Chawapun, Angkana Wipatanawin, Padchanee Sangthong
- S1-P-28 **Antioxidant activity, β -amyloid aggregation inhibition, and neuroprotective effect of cricket (*Gryllus bimaculatus*) ethanol extract**
Patchrapon Boonsin, Chantana Boonyarat, Kusawadee Plekartoke, Prasert Reubroycharoen, Pornthip Waiwut
- S1-P-29 **Serum hsa-miR-299-5p and hsa-miR-379-5p are novel diagnostic markers for HBV-related hepatocellular carcinoma**
Pattaraporn Nimsamer, Natthaya Chuaypen, Sunchai Payungporn, Posit Tangkijvanich
- S1-P-32 **The diagnostic and prognostic roles of serum sulfatase-2 in patients with HBV-related hepatocellular carcinoma**
Pimthong Thaweethongkam, Natthaya Chuaypen, Sunchai Payungporn, Posit Tangkijvanich
- S1-P-39 **Anti-cancer effect of cucurbitacin B on cholangiocarcinoma cells**
Sumalee Obchoei, Sopit Wongkham, Aratee Aroonkesorn, Parichat Suebsakwong, Apichart Suksamrarn



The 6th International Conference on Biochemistry and Molecular Biology



- S1-P-41 **Biological activities of protein extracts from silkworm pupae against non-communicable diseases**
Suttida Chukiatsiri, Wirunya Hangtrakul

- S1-P-48 **Anti-inflammatory activity of JJBF11, a novel fluorinated triarylmethane derivative in LPS-stimulated macrophages**
Wipada Siritanyong, Jaray Jaratjaroonphong, Klaokwan Srisook

S2 Food, Biotechnology and Agricultural Biochemistry

- S2-O-01 **Molecular and functional characterization of sesquiterpene synthase1 from *Piper betle* L.**

Kodchakorn Aranyakanon, Rattikarn Buaruaeng,
Thunyared Kaewkhaw, Paphitchaya Naree, Chonnanit Choopayak

- S2-P-03 **Antioxidant activity of some instant sour curry pastes**

Suthasiri Anantawan, Chatchawin Petchlert

- S2-P-04 **Production of polyhydroxyalkanoates (PHAs) by microorganism from contaminated soil, industrial wastewater and domestic wastewater**

Kanokwan Nantha, Pilanee Vaithanomsat, Antika Boondaeng, Chanaporn Trakunjae, Sawitri Chuntranuluck

- S2-P-09 **Expression and purification of a cationic peptide hydrogelator in *Escherichia coli***

Naiyachon Thanitsorn, Napapol Poopanitpan,
Chomdao Sinthuvanich

- S2-P-10 **Acetylcholinesterase inhibition and antioxidant activities of polysaccharide-peptide complexes from edible mushrooms**

Suthida Thabthimsuk, Naphatsawan Panya, Amorn Owatworakit, Waeowalee Choksawangkarn

- S2-P-12 **Crystallization of surface mutated Penicillin G acylase from *Baillus megaterium***

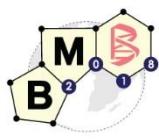
Nattawut Buasri, Theparit Traisaranakul, Ketsaraphorn Channgam, Jirundon Yuvaniyama

- S2-P-15 **Antibacterial and anticancer activities of protein hydrolysate from fish sauce byproduct**

Petlada Khositanon, Dao Inpratom, Tatiyar Somwang, Panata Lawsipo, Sittiruk Roytrakul, Waeowalee Choksawangkarn

- S2-P-17 **Synergistic effects of antioxidative peptides from rice bran**

Pichamon Kiatwuthinon, Neeracha Lapanusorn, Anunyaporn Phungsom,
Wirawan Tinanchai



The 6th International Conference on Biochemistry and Molecular Biology



- S2-P-18 **Dynamic expression of sulfate transporter genes in durian flesh during fruit ripening**

Pinnapat Pinsorn, Rainer Hoefgen, Supaart Sirikantaramas

- S2-P-20 **Production of immunoglobulin Y (IgY) antibodies against *Pseudomonas aeruginosa* from egg yolk**

Pornphimon Methenekul, Noppadol Prasertsincharoen, Thippayarat Chahomchuen

- S2-P-22 **Effect of drought stress on growth and photosynthetic pigments in transgenic kdml 105 rice overexpressing *OsCam1-1* gene**

Pun Sangchai, Nuchanat Wutipraditkul

- S2-P-25 **Development of oral vaccination for preventing streptococcosis disease in nile tilapia by using algae as a delivery system**

Sugunya Maneenin, Atittaya Hoihuan, Ansaya Pumchan, Thararat Phurahong, Nontawith Areechon, Thanyanan W. Brocklehurst, Sasimanas Unajak

- S2-P-29 **Antibacterial activity of protein hydrolysates from Thai rice grain**

Thitiporn Ditsawanon, Yodying Yingchutrakul, Sittiruk Roytrakul

- S2-P-30 **Tyrosinase inhibitory activity of some edible plants**

Titima Ketprayoon, Chanya Chaicharoenpong

- S2-P-31 **The induction of antioxidant compound production in cadmium treated peanut hairy root culture**

Vijakhana Pilaisangsuree, Anupan Kongbangkerd, Apinun Limmongkon

S3 Bioinformatics and Systems Biology

- S3-P-06 **Screening of non-cytotoxic membrane penetrating peptides using machine learning approach**

Patcha Poungsombat, Wanapinun Nawae, Marasri Ruengjitchatchawalya

- S3-P-08 **Rice lipoxygenase: their sequence analysis and putative roles**

Sawitree Kumsaoad, Paweena Pongdontri

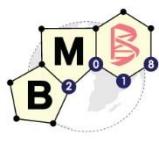
S4 Microbiology and Infectious Diseases

- S4-P-06 **Molasses wastewater treatment using microalgae *Bumilleriopsis peterseniana* and its hydrogen production**

Panutda Yodsang

- S4-P-07 **Generation of a DNA vaccine expressing the porcine epidemic diarrhea virus immunogen fused with cholera toxin B subunit**

Pimpoy Rattanaamnuaychai, Phenjun Mekvichitsaeng, Kanokwan Poomputsa, Yaowaluck Maprang Roshorm



The 6th International Conference on Biochemistry and Molecular Biology



- S4-P-11 **Potential antibacterial activity of designed *Crocodylus siamensis* hemoglobin-based peptides**

Sirinthisip Sosiangdi, Anupong Tankrathok, Sompong Klaynongsruang, Nisachon Jangpromma

- S4-P-13 **Antibacterial and antioxidant activity of plasma from crocodile (*Crocodylus siamensis*) and human**

Thanawan Srilert, Sasinapa Sitthisuan, Sompong Klaynongsruang, Nisachon Jangpromma

- S4-P-14 **Production of antimicrobial metabolites active against *Burkholderia pseudomallei* from *Bacillus amyloliquefaciens* strains kku11 and kku14**

Thanya Potised, Chotima Potisap, Atcha Oraintara, Rasana W. Sermswan

- S4-P-15 **Comparative computational analysis of substrate binding mode in bacterial and mammalian ethylenetetrahydrofolate reductase**

Wanisa Salaemae, Wanita Pantong, Manasphat Khunmud, Nunta Churnchow

S5 Bioenergy

- S5-O-01 **Regulation of the ethanol stress response by transcription factor Znf1 in yeast *Saccharomyces cerevisiae***

Wiwan Samakkarn, Nitnipa Soontorngun

S6 Molecular Genetics and Genomics

- S6-O-03 **Construction of transgenic arabidopsis expressing *crooked neck* gene from rice**

Thiti Suttiyut, Juthamas Chaiwanon, Supachitra Chadchawan

- S6-P-01 **Study of protein patterns in wild mushrooms using a proteomic approach**

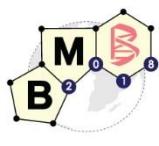
Aphinya Thinthasit, Suchewin Krobthong, Sittiruk Roytrakul, Sompong Klaynongsruang, Nisachon Jangpromma

- S6-P-07 **The growth analysis of *ylsnf1* gene deletion mutant of *Yarrowia lipolytica* on hydrophobic substrate media**

Napapol Poopanitpan, Threesara Lertvatasilp, Narisa Poonsub, Prapasiri Jantanee, Sasimanas Unajak, Chotika Yokthongwattana

- S6-P-10 **The establishment of CD47 deficient cholangiocarcinoma cell line by CRISPR/Cas9 technique**

Phattarin Pothipan, Ryusho Kariya, Paweena Dana, Kanha Muisuk, Kanlayanee Sawanyawisuth, Chaisiri Wongkham, Sopit Wongkham, Seiji Okada, Kulthida Vaeteewoottacharn



The 6th International Conference on Biochemistry and Molecular Biology



- S6-P-12 **Phylogenetic and nucleotide sequence analysis of *yueB* gene obtained from *Bacillus subtilis* isolated from Thai natto**

Pornthip Chawapun, Padchanee Sangthong, Pairote Wongputtisin, Keitarou Kimura, Supawadee Sriyam

- S6-P-14 **Identification of novel interactor of evolutionarily conserved splicing factor Snu66**

Sittinan Chanarat, Stefan Jentsch

- S6-P-16 **Identification of SSR markers linked to activity of lipoxygenase in soybean *Glycine max (L.) Merr.***

Supapit Horpratum, Chanita Paliyavuth, Waraluk Kasettranan

S7 Environmental Sciences and Toxicology

- S7-P-01 **The protective effects of *Tiliacora triandra* against methomyl induced cytotoxicity in murine macrophage (RAW 264.7) cells**

Boonyarit Kukaew, Wanna Sirisangtragul, Sompong Klaynhongsruang, Nisachon Jangpromma

- S7-P-06 **Effect of alcohol stress on cell growth and its recovery of *Synechocystis* sp. PCC 6803**

Phuwanet Vachiranuvathin, Saowarath Jantaro

- S7-P-07 **Toxicity investigation of amanitas wild mushrooms from local market in Khon Kaen**

Prakaymars Panumars, Sompong Klaynongsruang, Nisachon Jangpromma

- S7-P-08 **Efficiency of polysaccharide and *Nostoc* sp. up2 cells on growth of rice seedling (san-pah-twang 1) and soil quality improvement**

Supattra Tiche, Kritchaya Issakul, Neti Ngearnpat

- S7-P-09 **Toxicity of paraquat on growth of cyanobacteria (*Nostoc* sp. N1 and *Anabaena* sp. A1) and germination of rice seed (san-pah-twang 1)**

Suwakan Tansai, Kritchaya Issakul, Neti Ngearnpat

S8 Innovative Sciences and Commercialization

- S8-O-01 **Green synthesis of water-soluble quantum dots**

Yotsakorn Tantiapibalkun, Galayanee Doungchawee, Kanlaya Prapainop

- S8-O-02 **Preparation of PLGA and PLGA-chitosan nanoparticles for breast cancer delivery system**

Ployphailin Chokswad, Ruttanaporn Kriangsaksri, Komkrich Sawasdee, Kanlaya Prapainop