

ICBS

HAL. 148

"Prospect and Challenge of Biomedical Research"

III.A.7.1

EDHYANA



International
Conference on
Biomedical
Science 2012

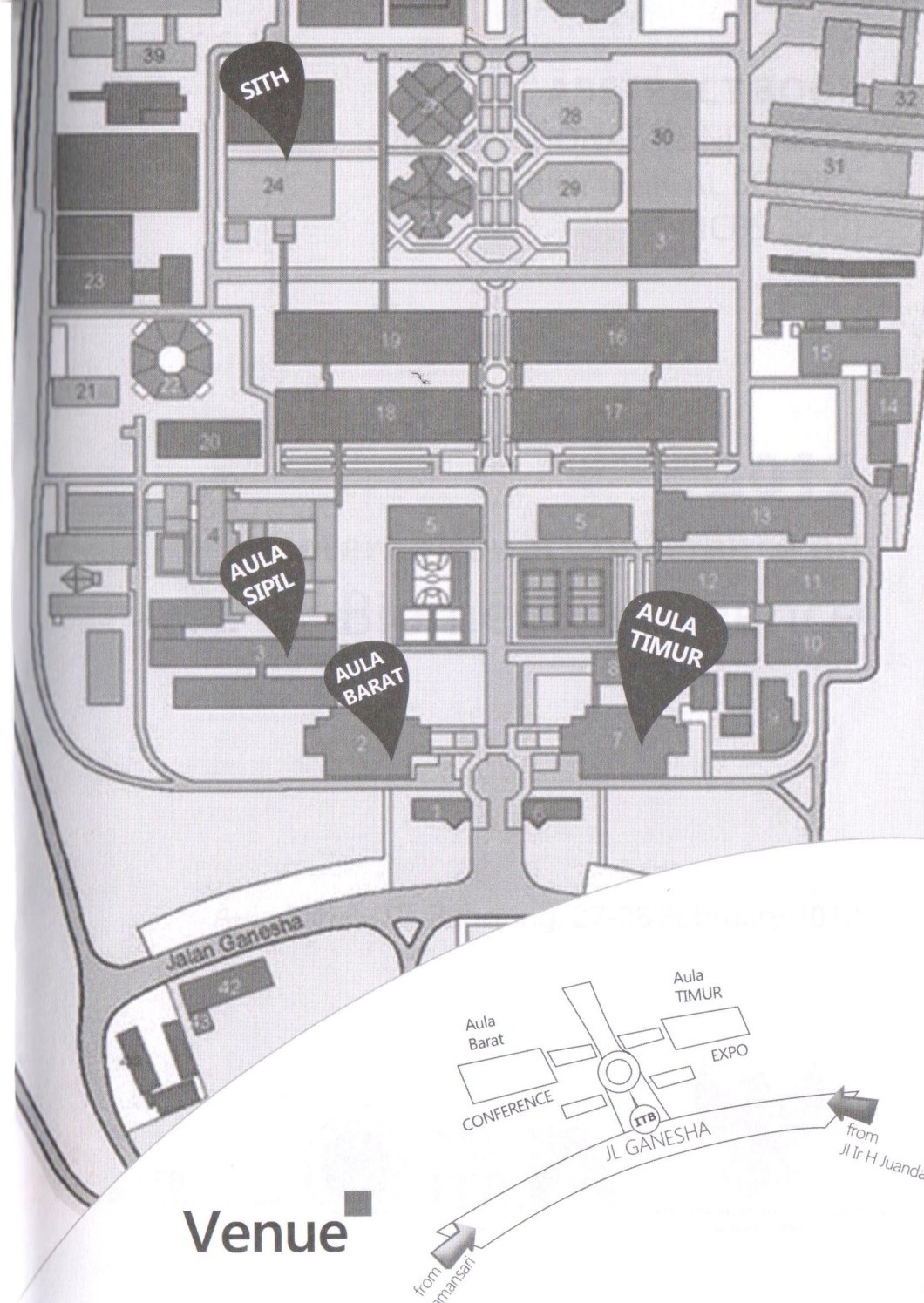


Corrections

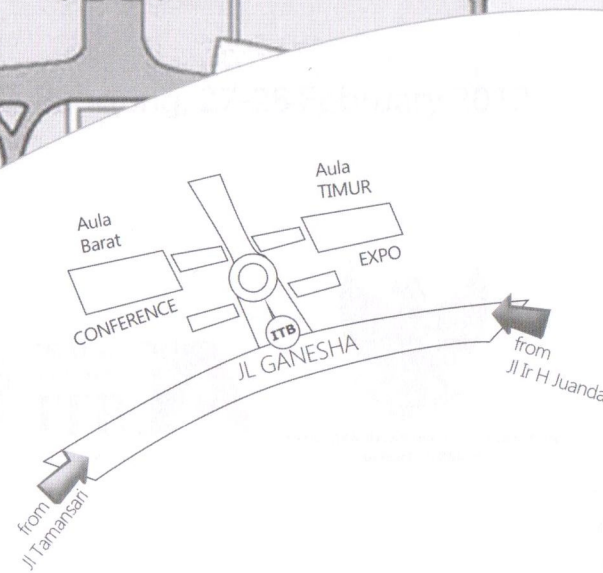
Prof. Dr. dr. Amin Soebandrio, Prof. Dr. dr. Irawan Yusuf and Prof. Suthat Fucharoen should be written as **KEYNOTE SPEAKERS.**

Title of the lecture from **Prof. Dr. Herman Susanto (page vi)** should be :

Profile of Cervical Cancer Patients at Dr.Hasan Sadikin Hospital Bandung, Indonesia.
Apologize for the inconvenience



Venue



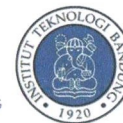
ABSTRACT BOOK
INTERNATIONAL CONFERENCE
ON BIOMEDICAL SCIENCE
(ICBS 2012)



2012

International Conference on
Biomedical Science

Aula Barat, ITB, Bandung, 27-28 February 2012



KEDUTAAN BESAR REPUBLIK INDONESIA
BERLIN - JERMAN

This book contains the abstracts of the posters presented in the International Conference on Biomedical Science 2012. They reflect the authors' opinions and are published as presented without change, in the interests of timely dissemination. Their inclusion in this publication does not necessarily constitute endorsement by the organizers.

Copyright and Reprint Permission

All rights reserved. This book, or parts thereof, may not be reproduced in any form or by any means, electronic or mechanical photocopying, recording or any information storage and retrieval system now known or to be invented, without written permission from the organizer.

© 2012 by the ICBS 2012 Organizing Committee

Cover design by Budi Permana

Logo design by Alvanov Spalanzani

Published 20 February 2012

ICBS 2012 Organizing Committee

School of Life Sciences and Technology, Institut Teknologi Bandung

Preface

The organizing committee of the International Conference on Biomedical Science 2012 (ICBS 2012) is highly pleased to have more than one hundred and fifty abstracts submitted to the Conference with more than four hundreds registered as participants ranged from students, researchers, and practitioners.

Prof. Harald Zur Hausen, A Nobel Laureate in Medicine 2008, Prof. Amin Soebandrio, a representative from Ministry of Research and Technology-Indonesia, Prof. Rainer Fischer, a prominent scientist from Fraunhofer, Germany and other prominent scientists will provide excellent opportunities for the participant to discuss the various research and application in biomedical science.

The objective of this seminar is to bring together academics, researcher, students, clinicians and industry to exchange and share their experiences in biomedical science, aiming in increasing biomedical science research activities in Indonesia that eventually will play an important role in improving health and the quality of life.

Finally, on behalf of the organizing committee of the ICBS2012, we would like to express our gratitude to the keynote speakers as well as participants for their contribution in making the conference a success. As general chairperson, I highly appreciate the great efforts of the members of the organizing committee whose hard work really made it possible to have this symposium.

Bandung, 20 February 2012

Marselina Irasonia Tan
Chairperson, ICBS 2012

Conference Committee

ADVISORS

Dean of School of Life Sciences and Technology, Institut Teknologi Bandung
Prof. Dr. Tati Suryati Syamsudin, MS. DEA.

SCIENTIFIC COMMITTEE

- Dr. Anggraini Barlian (SITH-ITB, Indonesia)
- Dr. Maelita R. Moeis (SITH-ITB, Indonesia)
- Dr. Dessy Natalia (FMIPA-ITB, Indonesia)
- Dr. Debby S. Retnoningrum (SF-ITB, Indonesia)
- Prof. Dr. Sofia Mubarika (University of Gadjah Mada, Indonesia)
- Dr. Joko Pamungkas (IPB, Indonesia)
- Timothy R. Hirst, Ph.D. (Gamma Vaccine, Australia)
- Prof. Günter Vollmer (Dresden University, Germany)
- Prof. Ruml Thomas (Praque, Czech Republic)
- Dr. Masaharu Tokoro (Kanazawa University, Japan)

ORGANIZING COMMITTEE

Chairperson : Dr. Marselina Irasonia Tan

Vice chairperson : Dr. Ernawati A. Giri-Rachman

Secretary : Dr. Ramadhani Eka Putra

Treasurer : Dr. Iriawati

Committee Members :

- Dr. Rizkita R. Rachmi
- Dr. Indra Wibowo
- Dr. Wardono Niloperbowo
- Dr. I Nyoman P. Aryantha
- Dr. Lulu L. Fitri
- Dr. Tjandra Anggraini
- Dr. Ayda T. Yusuf
- Dr. Elvi Restiawaty
- Ani Nurani, A.Md
- Edi Sasmita, SE
- Dra. Sukmayani
- Muhammad Purnama, ST
- Puspitaningsih, MS.
- Rini Triani Artono, M.Sc.
- Novi Tri Astutiningsih, M.Sc.
- Karlia Meitha, M.Si.

Contents

Preface.....	ii
Committee.....	iii
Contents.....	iv
Conference Program.....	xviii
Oral Poster Presentation Schedule.....	xxi
Dean of School of Life Sciences and Technology of Institut Teknologi Bandung Welcoming Remarks.....	1
Opening Remarks from the Rector of Institut Teknologi Bandung.....	3
Abstracts.....	5
Keynote Lectures	6
Keynote 1: by Prof. Dr. Harald zur Hausen (German Cancer Research Centre – Germany).....	7
Keynote 2: Lipids in Host-Pathogen Interactions: Insight into Phagosome Function by Prof. Bernd Helms (Utrecht University – The Netherlands).....	8
Keynote 3: Plant-Derived Biopharmaceuticals: Moving Plant-Derived Antibodies and Vaccines Towards Clinical Trials by Prof. Dr. Rainer Fischer (Institut für Biologie VII, RWTH Aachen and Fraunhofer IME).....	9
Keynote 4: Cancer Research in Indonesia, GPR55 and Its Potential for a Anticancer Drug Target by Dr. Marselina I. Tan (School of Life Sciences and Technology, Institut Teknologi Bandung).....	11
Invited Lectures	12
Invited 1: Prospect and Challenge of Biomedical Research by Prof. Dr. dr. Amin Soebandrio (Minister for Health & Medicine, Ministry for Research & Technology, Republic of Indonesia).....	13
Invited 2: by Prof. Dr. dr. Irawan Yusuf (Indonesian Academy of Sciences Indonesia).....	14
Invited 3: Innovative Strategy to Optimize the Sequences of Peptide Inhibitors by Dr. Claire Lesieur (AGIM, Université Joseph Fourier).....	15
Invited 4: Quantitative Proteomic Identification of Host Factors Involved in the Salmonella typhimurium Infection Cycle by Dr. Dora V. Kaloyanova (Utrecht University).....	16

Invited 5: Interaction of M protein of <i>Streptococcus pyogenes</i> with Human Components and Its Contribution in Virulence and Autoimmunity by Dr. Debbie S. Retnoningrum (Laboratory of Pharmaceutical Biotechnology, School of Pharmacy, Institut Teknologi Bandung)	17
Invited 6: Development of New Generation Vaccines by Professor Dr Tim Hirst (Gamma Vaccines, Canberra, Australia).....	18
Invited 7: Molecular Biology and Pathology of the Malarial Parasites by Professor Dr Din Syafruddin (Eijkman Institute, Indonesia).....	19
Invited 8: Sustainable Use of Specific Pathogen Free and Specific Disease-Susceptible Nonhuman Primates for Biomedical Research by Dr. Joko Pamungkas (Primate Research Center, Bogor Agricultural University).....	20
Invited 9: Development and Production of a Cost Effective Glicoconjugate Vaccine Against <i>Haemophilus influenzae</i> Type b: An Industry Experience by Dr. Neni Nurainy (Research and Development PT Biofarma Indonesia).....	21
Invited 10: Molecular Diagnostics in Practical Oncology by Dr. Kovalenko S. (Bioron GmbH Ludwigshafen, Germany).....	22
Invited 11: Diagnostic Bottleneck in Tuberculosis Management by Dr. Bacht Alisjahbana (Internal Medicine Department, Medical Faculty, Padjadjaran University, Hasan Sadikin Hospital, Bandung).....	23
Invited 12: Diagnostic Bottleneck in Tuberculosis Management by Prof. Dr. Herman Susanto (Faculty of Medicine Universitas Padjadjaran).....	24
Invited 13: EBV and Nasopharyngeal carcinoma (NPC) in Indonesia: Effort to downstaging and prevention of NPC by Prof. Dr. Sofia Mubarika (University of Gadjah Mada, Indonesia).....	25
Invited 14: Neural Stem Cells and Brain Microvessel Endothelial Cells as Its Niche: <i>in Vitro</i> Co-culture and Traumatic Injury <i>in Vivo</i> Model System by Ahmad Faried, MD., PhD. (Universitas Padjadjaran, Bandung).....	27
Invited 15: Transgenic Zebrafish Models for Liver Cancers and Drug Screening by Prof. Zhiyuan Gong (Department of Biological Sciences, National University of Singapore, Singapore).....	28
Invited 16: Molecular Basis of Thalassemia in Indonesia by dr. Iswari Setianingsih PhD (The Eijkman Institute for Molecular Biology, Jakarta, Indonesia).....	29

Invited 17: Research in Human Genetics by Prof. Suthat Fucharoen (Mahidol University, Thailand).....	31
Oral Posters Presentation: Tropical Infectious Disease	33
01 – 01 Trichomonads Species Distributing in Southwest Sumba District, Indonesia Ali B Kusuma, Anggie PN Hidayati, Ernawati A Giri-Rachman, Din Syafruddin, Hisao Yoshikawa and Masaharu Tokoro.....	34
01 – 02 The Humoral Immunity Response in Mice Injected with Gamma Irradiated <i>Plasmodium berghei</i> Darlina Tidarlan and Tur Rahardjo.....	35
01 – 03 High Prevalence of Panton-Valentine leukocidin (PVL) Genes among Methicillin-Sensitive <i>Staphylococcus aureus</i> (MSSA) of Patients with Skin and Soft Tissue Infections in the Community in Indonesia (Interim report) Dewi Santosaningsih, Sanarto Santoso, Nyoman Sri Budayanti, Ketut Suata, Dicky B. Widhyatmoko, Priyo Budi, K.Kuntaman, Josephine W.I. van Nierop, Geraldine L. Nanninga, Mitchell Laurens, Juliëtte A. Severin, and Henri A.Verbrugh.....	36
01 – 04 Alanine-scanning mutagenesis identifies residues in β domain of streptokinase of <i>Streptococcus pyogenes</i> involved in plasminogen activation Efrida Martius, Ernawati A. Giri-Rachman, Yeyet Cahyati and Debbie Sofie Retnoningrum.....	37
01 – 05 Prevalance of soil transmitted helminthes (<i>Ascaris lumbricoides</i> and <i>Trichuris trichiura</i>) among Orang Asli Temuan School Children in Dengkil, Selangor, Malaysia Badrul Munir Md Zain.....	38
01 – 06 Automated Quantification Parasitemia of <i>Plasmodium berghei</i> infected Mice Using Open Access Software Dwi Ramadhani and Siti Nurhayati.....	39
01 – 07 Evolutionary Implications of Synthetic Viability of SERA1-3 Triple Knockout Malarial Parasites Elyzana D. Putrianti, Jan Burgold, Julius C. Hafalla and Kai Matuschewski.....	40
01 – 08 Parasitic Infections among Aborigine Children in Kelantan, Malaysia: A Constant Health Problem Hartini Yusof, Geishamimi d/o Gopal, Mariam Ahmad Zawawi, Mohamed Kamel Abd. Ghani, Hidayatul Fathi Othman, Norhisham Haron and Maimunah Mustakim.....	41
01 – 09 Nasopharyngeal Colonization of <i>Streptococcus pneumoniae</i> and <i>Klebsiella pneumoniae</i> among Young Children and Adults in Indonesia Helmia Farida, Juliëtte A Severin, Peter Hermans, Hendro Wahyono and Henri A. Verbrugh.....	42
01 – 10 Molecular Epidemiology Study of <i>Mycobacterium tuberculosis</i> in Java and Papua Inri Kusumadewi, Lidya, Ernawati Giri Rachman, Bacht Alisjahbana, Ida Parwati and Reinout van Crevel.....	43
01 – 11 Applicability of an Oligonucleotide Probe in Radioisotope (^{32}P)-Based Dot Blot Hybridization Method for Detection of Hepatitis C Virus (HCV) for Large Samples and Surveillance Study: A Preliminary Study	

Applicability of an Oligonucleotide Probe in Radioisotope (³²P)-Based Dot Blot Hybridization Method for Detection of Hepatitis C Virus (HCV) for Large Samples and Surveillance Study: A Preliminary Study Maria Lina, Rosilawati and Andi Yasmon.....	
Protective Efficacy of Gamma Irradiated Malaria Parasites of <i>Plasmodium berghei</i> in Pregnant Mice Mukh Syaifudin, Tur Rahardjo, Teja Kisnanto and Ade Andika Chandra.....	
The Development of Repellent Gel That Contains Essential Oils from Three Local Plants against Dengue Vector Hidayatulfathi Othman, Sallehudin Sulaiman, Ahmad Fuad Shamsuddin, Nor Zafirah Abu Bakar, Nur Hazwani Abdul Aziz, and Nur Afriza Mohd Faizal Ong.....	
Simulation of Projection Model for Mosquito Population in Spesific Area Nuning Nuraini and M.Wefy.....	
Role of Residues 256-257 and 278 in β Domain on Plasminogen Activation of Streptokinase of <i>Streptococcus pyogenes</i> Purwaeni, Ernawati A. Giri Rachman and Debbie S. Retnoningrum.....	
Construction and Transient Expression of Recombinant Large Hepatitis B Surface Antigen (L-HBsAg) in Plants to Develop Third Generation Hepatitis B Vaccine Putri Dwi Utari, Dina Rachmi Ramadhani, FX Reymond Sutandy, Lailatul Badriyah, Tati Kristianti, Ami Estiati, Sony Suhandono and Ernawati Arifin Giri Rachman.....	
Recombinant BCG (rBCg) Expressing the MSP1-C of <i>Plasmodium falciparum</i> Modulates Nitric Oxide Production by Murine Macrophages Dhaniah M, Anis Fadhillah Z, Nurul Asma A, Norazmi MN and Rapeah S.....	
Measurement of <i>Plasmodium</i> Lactate Dehydrogenase (pLDH) Activities in <i>Plasmodium berghei</i>-Infected Erythrocytes which Treated by Hepes Lysis and Makler and Hinrich (1993) Technique Shafariatul, A.I., Hasidah M. Sidek, Salmijah Surif, Zakiah, Ho Siew Hong and Asmah .H.....	
Molecular identification of nasopharyngeal colonization of <i>Streptococcus pneumoniae</i> Siti Mudaliana, Regina Angeline, Lia Waslia, Decy Subekti, Kuntjoro Harimurti and Dodi Safari.....	
A Review on Malarial Parasites Isolated from Blood Specimens in A Tertiary Hospital Wan Nor Amilah WAW, Zaidah AR and Zeehaida M.....	
Helminthiasis: The Neglected Tropical Disease Zaidah AR, Zairi NZ, and Zeehaida M.....	
PhoR of <i>Mycobacterium tuberculosis</i> as a Target for High Throughput Screening System of Novel Anti-Tubercular Drugs Irma Sophie, Saripah Sundari, Junessa Palao Kurniadi and Ernawati A. Giri-Rachman.....	
The Lung Diseases Diagnosis Software: Influenza and Tuberculosis Cases Study Ria Lestari, Munawar Ahmad, Bacht Alisjahbana and Tjahjono Djatmiko.....	
Oral Poster Presentation: Applied Biomedics in Bioindustry and Clinics (Basic)	

02 - 01	Synthesis and Characterization P25₁₋₉ Protected Peptide Fragment as Precursor of Universal Influenza Vaccine Component Ari Hardianto, Toto Subroto and Unang Supratman.....	59
02 - 02	Increase of Oxidative Stress and Accumulation of α-Synuclein Protein in Midbrain of Rotenone Treated Wistar Rat Arief BudiYulianti, Sony Heru Sumarsono, Ahmad Ridwan and Ayda T Yusuf.....	60
02 - 03	Identification of Metal Cofactor of Recombinant Hybrid Superoxide Dismutase from <i>Staphylococcus equorum</i> Indrayati A., Suciati, T., A. Sukmadaja and Retnoningrum, D. S.....	61
02 - 04	The Effect of Catechins Green Tea Toward eNOS Expression in Aortic Male Wistar Rats Induced High Fat Diet Erna Susanti, Retty Ratnawati, Ciptati, Rohayati Suprihatini and Satuman.....	62
02 - 05	Inhibitory Effects of <i>Eurycoma longifora</i> Crude Extract and Eurycomanone Towards Xenotransplanted Nude Mice Asmah R., Yuzmazura Z., Azimahtol H.L.P., Noor Rain A., Fauziah O., Abdah M.A and Nurul Amira B.....	63
02 - 06	The influence of Amino Acid Substitutions on The Biological Activity of Recombinant Human Interferon alpha2b Using HepG2 Cell Line Ratih Asmana Ningrum, Debbie Sofie Retnoningrum, Yeyet Cahyati Sumirtapura and Heni Rachmawati.....	64
02 - 07	Subchronic Toxicity Test of <i>Sonchus arvensis</i> Leaves Decoction as Herb Medicine for Bladder Stone Disease on Wistar Rat Diah Dhanawaty D., Kosasih Padmawinata, Iwang Soediro, and Andrianus A. Soemardji.....	65
02 - 08	Chromatographic Separation on Ethanol Extract of <i>Andrographis paniculata</i> Ness. and Their Antibacterial Evaluation Ririn Restu Amelia and Esti Wahyu Widowati.....	66
02 - 09	Inhibitory Effect of Green tea catechins from GMB4 clone on lipogenesis and adipogenesis: Through SREBP-1, C/EBP-α and ROR-α in vivo and in vitro Herin Mawarti, Faridha KH, Retty Ratnawati, Satuman, Ciptati, Rohayati Suprihatini and Diana Lyrawati.....	67
02 - 10	<i>Hibiscus sabdariffa</i> Calyx Extract (UKMR-2) Prevents Sperm and Testis Defects in Streptozotocin Induced Diabetic Rats Muhd Hanis Md Idris, Jamaludin Mohamed and Siti Balkis Budin.....	68
02 - 11	Reproductive Function in Female Wistar Rats (<i>Rattus norvegicus</i> Berkenhout, 1769) after Oral Administration of Pigeon Orchid (<i>Dendrobium crumenatum</i> Swartz, 1799) Pseudobulb Juice L. Fitria and A. Ridhowati.....	69
02 - 12	Tualang (<i>Koompassia excelsa</i>) honey enhances osteoblast cell line proliferation and its alkaline phosphatase activity Nurul Asma Abdullah, Nur Akila Mohd Yusoff, Nur Azizah Abdul Hadi, Zurairah Berahim, Haslina Taib and Norliana Ghazali.....	70
02 - 13	Intracellular Expression of Hbsag Genotype B in <i>Pichia Pastoris</i> KM71 Hyperresistant Zeocin Rahma Tejawati Maryama, Shinta Kusumawardhani, Dessy Natalia, Debbie S. Retnoningrum, and Ernawati A. Giri Rachman.....	71
02 - 14	Effect of Aloe Vera Gel in Protecting Rat's Lung from Damage Process	

02 – 14	Effect of Aloe Vera Gel in Protecting Rat's Lung from Damage Process Caused by Cigarette Smoke Exposure Yogi Umbarawan, Nur Atik, Rovina Ruslami and Achadiyani.....	72	02 – 27	Involvement of K⁺ Channels in the Peripheral Antinociception of Flavokawin B Mohd Nasier Kamaldin, Tengku Azam Shah Tengku Mohamad, Nordin Lajis, Daud Ahmad Israf and Mohd Roslan Sulaiman.....	85
02 – 15	Enzymatic Characterization of Partially Purified Cyclodextrin Glycosyl transferase from Indonesian Alkalophilic Bacillus Strain (LT1B). NurMiftahurrohmah, Catur Rianiand Debbie S Retnoningrum.....	73	02 – 28	Potential of Open Wound Healing by <i>Alocasia Sp.</i> Stem Juice on Rats Mohd Zulasyraf Mohd Zaki, Asmah Hamid, and Mazlyzam Abdul Latif.....	86
02 – 16	Ionic Current Response After 7-ketocholesterol Addition to PC-12 Cell Cultured in vitro Indra Kusuma, Prasandhya Astagiri YusufandNurhadi Ibrahim.....	74	02 – 29	The Effect of Different Annealing Temperatures on the Surface Morphology of Bovine Bioceramic Bone Adam Z., Firdaus A.R., Rusidah M.Y., Hawani A.A., Suhaili Y., Suzina S.A.H.....	87
02 – 17	Effect of Lithospermi Radix on contact dermatitis induced by Dinitrofluorobenzene in Mice Hyungwoo Kim.....	75	02 – 30	Morphological and Histological Changes of the Liver in Streptozotocin-Induced Diabetic Rats Treated with <i>Hibiscus sabdariffa</i> Linn. Calyx Extracts Nazratun Nafizah Akhtar Husin, Siti Balkis Budin, Mohd Hanis Md Idris, Santhana Raj Louis and Jamaludin Mohamed.....	88
02 – 18	Effect of Green Tea on Ferritin Level of Ferro Sulfate Orally-Induced Albino Rats Joko Setyono, Saryono and Alfi Muntafiah.....	76	02 – 31	Isolation And Identification Of Phospholipase C Zeta From Testes Of Sea Cucumber Using One-Step RT - PCR N.A. Norbidin, M.N.N. Anuar, N.F. Mohd Nordin, N.H. Samsul Baharil, Y.T. Samat, M.H. Khairudin, N.A. Alwi, N.H. Abdul Mutalib, F. Amir Shapuddin, Y.K. Cheahand S. Sukardi.....	89
02 – 19	A Cross-Sectional Study of Bone Resorption Markers on Healthy Pre and Postmenopausal Kelantanese Malay Women Hermizi Hapidin, Sakinah Harith and Hawa Mahmood.....	77	02 – 32	Preservation and Sterilisation Effects on Water Vapour Transmission of Human Amniotic Membrane Nor Kamalia Zahari.....	90
02 – 20	Peroxisome Proliferator Activated Receptor-γ (PPARγ) and Extracellular Regulated Kinase $\frac{1}{2}$ (ERK1/2) as Potent Target to Inhibit Adipogenic Programme Through Black Tea (<i>Camellia sinensis</i>) Treatment in Wistar Rats with High Fat Diet Hendra Susanto and Abdul Gofur.....	78	02 – 33	Antidiabetic Effect of Decoction of <i>Sansevieria trifasciata</i> Leaves on Alloxan Diabetic White Rats (<i>Rattus norvegicus</i> L.) Nur Qomariyah, Mulyati Sarto and Rarastoeti Pratiwi.....	91
02 – 21	The Antioxidant Effect of Pearl Grass (<i>Hedyotis corymbosa</i> (L) Lamk.) Towards Rat's Malondialdehyde (MDA) Blood-Level Induced by Preserved-Formalin Tofu Masganjar Nugraha and Euis Reni Yuslianti.....	79	02 – 34	Angiotensin Converting Enzyme Inhibitory Activity of <i>Bekasam</i> (Indonesian Fermented Fish) Prima Retno Wikandari	92
02 – 22	Nutritional Composition and Determination of Total Phenolic, Vitamin C, E and Antioxidant Activity of Two Different Type of <i>Ficus carica</i> Cultivated in Saudi Arabia Fatimah Ghazi and Asmah Rahmat.....	80	02 – 35	The Effects of Tocotrienol Rich Fraction on Fenitrothion-Induced Hepatotoxicity Putri Ayu Jayusman, Siti Balkis Budin, Ahmad Rohi Ghazali, Izatus Shima Taib and Santhana Raj Louis.....	93
02 – 23	Oyster (<i>Pleurotus ostreatus</i>) Extract Regenerate Pancreatic Islet Cell in Type II Diabetic Mice Makhyan Jibril A, Aditya Satriya N, Annisa Alkarimah, and Durrotul Ikrimah, Dicky Stevano Z and Nur Permatasari.....	81	02 – 36	Effect of Different Concentration of Ethylene Glycol to Recovery Rate of Sperm Vitrification in Human Rini Widyastuti, Sony Heru Sumarsono and Arief Boediono	94
02 – 24	Verapamil and Chloroquine Increased <i>in vitro</i> Intracellular Concentration of Primaquine Through the Inhibition of P-glycoprotein Expression Melva Louisa, Frans D Suyatna, Din Syafruddin, Septelia Inawati Wanandi and Puji Budi Setia Asih.....	82	02 – 37	A Limited Study of the Genotype-Phenotype Correlation in Cutaneous Adverse Drug Reaction among Epileptic Patient Treated With Carbamazepine Ratnaningrum SD, Rani ZZ, Then SM, Jamal ARA and Faradz SMH.....	95
02 – 25	Potential of Genistein Testosterone Level and Spermatogenesis on Mice (<i>Mus musculus</i>) Male Primiani, C.N., Lestari, U., and Mohamad Amin.....	83	02 – 38	Effect of Calorie-Controlled Diet on <i>Firmicutes</i> Population in Overweight and Obese Indonesian Females Siti Amalia Hasnida, Rieza Aprianto, Antonius Suwanto, Dea Indriani Astuti.....	96
02 – 26	Induction of Cytoprotection Mechanism by Bambangan (<i>Mangifera pajang</i>) Fruit Extract in Hepatocytes: Novel Approach in Protection of Cells Against Oxidative Damage Caused by Toxicant Mohd Fadzelly Abu Bakar, Maryati Mohamed, Asmah Rahmat, and Jeffrey Fry.....	84	02 – 39	The Effect of Pentagamavunon-0 to The Expression of COX-2, Endometrium Thickness, and The Sum of Epithelial Luminal Endometrium of Rats (<i>Rattus norvegicus</i>) Sprague dawley Induced by Luteinizing Hormone Soraya Rahmanisa, Djaswadi Dasuki, and Sri Kadarsih Soejono.....	97
02 – 27	Involvement of K⁺ Channels in the Peripheral Antinociception of Flavokawin B		02 – 40	Association of ACE Gene Polymorphism and Electrolyte Homeostasis in Diabetic Nephropathy Syed M. Shahid, Rozeena Shaikh, Syeda N. Nawab, and Abid Azhar.....	98

02 – 41	Effects of Fenitrothion on Oxidative Stress Status and Morphology of Testis in Male Sprague-Dawley Rats Izatus Shima Taib, Siti Balkis Budin, Jamaludin Mohamed, Ahmad Rohi Ghazali and Putri Ayu Jayusman.....	99	02 – 54	Expression of Sialyltransferase, Light Clathrin A and B on Vero and MDCK Cell Line Maharani, Marselina I. Tan, Erna G.Rahman and Sony Heru Sumarsono	114
02 – 42	Monocyte Chemoattractant Protein-1 (MCP-1) Promoter Polymorphism and Its Correlation with Carotid Intima Media Thickness Yueniwati Y., Yurina V. and Indra M.R.....	100	02 – 55	Effects of Roselle (<i>Hibiscus sabdariffa</i> L.) Calyx Crude Extract on Freeze-Thawed Bovine Sperm Jamaludin Mohamed,Nor Azlinda Zaid, Tham Yu Chou, Santhana Raj Louis and Siti Balkis Budin	115
02 – 43	<i>Punica granatum</i> L. Peel Extract as Hepatotherapeutic Agent in Paracetamol-Induced Hepatotoxic Rat (<i>Rattus novergicus</i>) R. Meryalita, M. I. A. Mutaqin and M. I. Syukri.....	101	02 – 56	Polyphenol Effect to Insulin Receptor-B Expression on the Skeletal Muscle of Diabetic-Induced Mice Hesti Riany, Ahmad Ridwan and Anggraini Barlian.....	116
02 – 44	Inhibitory Activity of Curcuminoids and Turmeric Extracts on The <i>In Vitro</i> Albumin Glycation Reaction Evi Sovia, Elin Yulinah Sukandar, Lucy Dewi N Sasongko and Joseph Iskendierso Sigit	102	02 – 57	Leucine Supplementation Effect on Diabetic-Induced Adult Male Swiss Webster Mice's (<i>Mus musculus</i> L.) Blood Glucose and Brain Glutamate Level Esti Rachmawati Sadiyah, Lulu Lusianti Fitri and Ahmed M. Almehti.....	117
02 – 45	The Effects of Palm Vitamin E Supplementation on Biochemical Changes, Oxidative Stress and Antioxidants Status on Erythrocyte membrane in Streptozotocin Induced Diabetic Rats Fatmah Ali, Siti Balkis Budin, Zariyantey Abdul Hamid Nasar Alwahaibi, and Jamaludin Mohamed	103	02 – 58	Single Nucleotide Deletion in Women with a Prolonged Labor Hanny Ronosulistyo and I Ketut Gunarta.....	118
02 – 46	The Effect of Trypsin Addition on Cultivation of Influenza H1N1 A/ Solomon Island/ 3/ 06-Like Virus on Vero and MDCK Cell Line Fawzi Rahmadiyan Zuhairi, Maharani Ugiyadi and Marselina I. Tan	104	02 – 59	Study the molecular mechanism of nanocurcumin in suppressing chronic colitis in animal model Heni Rachmawati.....	119
02 – 47	Effect of Aloe Gel on Malondialdehyde (MDA) Level in STZ-Induced Diabetic Rat Ima Ruhmawati, Nia Lukita Ariani, Lulut Dwi Nurmamulyosari, Maulana Safril Yusuf, Anggraeni Widyaningsih, Rista Puji Kasprianti, Juliyatin Putri Utami, Kiki Suryani, Adeodatus Yuda Handaya, and Hendra Susanto	105	02 – 60	Pathological Manifestation of Lung Subcutely Treated With Fenitrothion Jamaludin Mohamed, Hanis Saimin, Izatus Shima Taib, Putri Ayu Jayusman, Siti Balkis Budin.....	120
02 – 48	The Effect of Aloe Vera Gel on TNF-α Level in STZ-Induced Diabetic Rat Kiki Suryani, Juliyatin Putri Utami, Anggraeni Widyaningsih, Rista Putri Kasprianti, Ima Ruhmawati, Nia Lukita Ariani, Lulut Dwi Nurmamulyosari, Maulana Safril Yusuf, Hendra Susanto and Yudha Handaya.....	106	02 – 61	The Immunogenicity of Oligosaccharide-CRM197 Neoconjugates Based on the Capsular Polysaccharide Structure of <i>Streptococcus pneumoniae</i> type 14 Dodi Safari, Bertie Dekker, Ger Rijkers, Hans Kamerling, and Harm Snippe.....	121
02 – 49	Curcuminoid May Be Potential to Help Smokers Quit Smoking Kusnandar Anggadiredja and Gofarana Wilar.....	107	02 – 62	Polyphenolic Content and Antioxidant Activity of Hydroalcoholic and Alcoholic Extract of <i>Thymus vulgaris</i> Anoosh Eghdami and Fatemeh Sadeghi.....	123
02 – 50	Olive Oil and Ozonated Olive Oil Enhances Wound Healing in Diabetic-Induced Mice Barlian, Anggraini, Aditiawati, Pingkan and Hesti Riany	108	02 – 63	Low Cost HIV-1 Quantitative RT-PCR Assay in Resource-Limited Settings: Improvement and Implementation Azzania Fibriani.....	124
02 – 51	Chlorophyllin Supplementation Able to Inhibit the Activation of Caspase-9 in the Liver Cell of Mice that Have Increased Due to Repeated Exposure of Formalin-Containing Fish A. A. Maramis and A. D. Corebima.....	109	02 – 64	Anti-Glycation and Antioxidant Activity of Areal Parts of <i>Satureja hortensis</i> Extract by Different Organic Solvents Gholamali Moradly, Anoosh Eghdami, and Fatemeh Sadeghi.....	125
02 – 52	Differences of Apoptosis Index between Female and Male in Regularly Hemodialysed Non-Diabetic Patients in Surabaya - Indonesia Djoko Santoso	111		Oral Poster Presentation: Applied Biomedics in Bioindustry and Clinics (Bio Industry)	126
02 – 53	Anti-Diabetic Effect of <i>Phaleria macrocarpa</i> Fruit Aqueous Extract in Diabetic Induced Rats Nurul Akmaryanti Abdullah, Mohd Aziz Dollah and Siti Raudzah.....	113	03 – 01	Dual energy x-ray absorptiometry (DXA) system reliability versus clinical observer reliability Clarys JP, Scafoglieri A, Tresignie J, Provyn S, Louis O and De Mey J.....	127
			03 – 02	HPLC Method Optimization for Determination of Morphine Ruzilawati Abu Bakar,Wan Nazirah Wan Yusuf, Norzihana Ramli, NorsuzianaAbd Latifand Aida Hanum Ghulam Rasool.....	128
			03 – 03	Development of Growth Protein Delivery System in Bone Implant Based Bionanocomposite. Rachmat Mauludin, Tri Suciati and Hana Pratiwi.....	129
			03 – 04	Characterization, Molecular Cloning and Expression of the DNA Encoding PhoR Sensor Domain from <i>Mycobacterium tuberculosis</i> as a Target Molecule for Novel Anti-Tubercular Drugs Aldina Suwanto, Arkasha Sadewa, Ihsanawati, and Ernawati A. Giri-Rachman.....	130

03 – 05	Design of Hydrophilic Single-Chain Variable Fragment Mutant:Antibody Engineering for Site-Specific Conjugation Aldina S. Suwanto, Asami Ueda, Ryuichi Kato, Ryutarō Asano, Mitsuo Umetsu, and Izumi Kumagai.....	131	03 – 01	Characterisation of mutation of the <i>SEDL (TRAPPC2)</i> gene in patients with X-linked Spondyloepiphyseal Dysplasia Tarda from a region of Indonesia A. Ruyani, P.T. Christie, J. Jeyabalan, B. Karyadi, C. Muslim, Sipriyadi, Suherlan and R.V. Thakker.....	146
03 – 06	Synthesis of Hydroxyapatite Membrane by Self Assembly Method Using Eggshell Membrane with Surface Modification as a Template for Bone Scaffold Application Abdul Halim Daulay, Ikrima Nathisa and Bambang Sunendar Purwasasmita.....	132	03 – 02	White-Lipped Green Pit Viper(<i>Trimeresurus albolabris</i> Gray) Venom'S Protein Effect on Rat'S (<i>Rattus norvegicus</i> Berkenhout, 1769) Breast Cancer Angiogenesis I Gusti Agung Ayu Ratna Puspitasari.....	147
03 – 07	Microbial Marine Diversity from Wakatobi Island: The Ultimate Source of Antimicrobial Prima Endang Susilowati, Dwi Pratiwi Oktavia Saputra, Sitti Nurjannah Paisal and Muhammad Natsir.....	133	03 – 03	Human Papilloma Virus Genotype and the <i>IFNG</i> Susceptibility among Cervical Cancer Patients in Bandung Edhyana Sahiratmadja, Ani Melani Maskoen, Ramdan Panigoro, Herman Susanto.....	148
03 – 08	The Development of Electroconvulsive Device for Anti-Convulsion Drug Trials Andre Widura.....	134	03 – 04	Mono para hydroxy chalcone Inhibits the Growth of Breast Cancer Cell Lines T47D and Influences Its Cell Cycle Arrest Retno Arianingrum, Indyah Sulistyo Arty and Sri Atun.....	149
03 – 09	Effect of Ultrasonic Homogenizer Modification to Porosity of Microcapsule Silica for Controlled Release Chlorhexidine 2%in Medicament Root Canal Infections Nur Denny Nurdin, Bona Yahya, and Bambang Sunendar.....	135	03 – 05	Aberrant Transcriptional Silencing of CTCF Gene in Glioma is Associated with Possible Post-Translation Modification Nurbainah Y., Shaharum S. and Nik Norliza N.H.....	150
03 – 10	The Effect of Samarium(III) Content on the Interaction and Fluorescence Properties of Chitosan-Samarium as Drug Delivery System Eny Kusriani, Rita Arbianti and Fika Andriani.....	136	03 – 06	Bioprospecting of Spons and Soft Coral from Wakatobi Marine National Park as Antitumor Nurrahmi Dewi Fajarningsih, Muhammad Nursid and Thamrin Wikanta.....	151
03 – 11	The Evaluation Inflammatory Potential of Die-Drawn UHMWPE and Stainless Steel 316 L WearParticles Gusnaniar, Rini Dharmastiti and Marsetyawan HNE Soesatyo.....	137	03 – 07	Development of Primary Cell Line Derived from Malaysian Human Bladder Tumor Wan Nur Baitty WMT, Nik Norliza NH, Nor Azam N, Rozita R and Nurmawati S.....	152
03 – 12	The Isolation of Ma-ACS1 Gene Promoter From Banana and Analysis of Ma-ACS1 Gene Function for Application in Edible Vaccine Production Karlia Mietha and Masriany Musa.....	138	03 – 08	Effect of Extracts <i>Eleutherine americana</i> Merr on Cancer Growth and Antioxidant Activity in MamaryCancer Tissue of Mice (<i>Mus Musculus</i>) Strain C3H Marselina I Tan and Young Othiwi Larasati.....	153
03 – 13	Design of Cytotoxic T Cell Epitopes of Influenza Virus for Universal Vaccines Rufika Shari Abidin, Arno Muellbacher, Aulikki Koskinen and Jill E. Gready..	140	03 – 09	Cancer Regulation by cWnt5a Gene Using Cadmium Induced Chicken Kidney (CK) Fibroblast <i>In Vitro</i> Martina Kurnia Rohmah, Sahard Reo Juantoro, Dwi Listyoriniand Abdul Gofur... <i>In vivo</i> Drug Combination Effects of ACA and AEA from <i>Alpinia conchigera</i> on Human Breast and Oral Cancer Xenografts Norhafiza Mohd Arshad, Lionel In Lian Aun, Mohamad Nurul Azmi, Khalijah Awang and Noor Hasima Nagoor.....	154
03 – 14	MaEXP1 Gene Promoter from Pisang Mas (<i>Musa acuminata</i> Colla) as Alternative Promoter to Develop Edible Vaccine. Yogi Prasetyo Nugroho and Fenny M. Dwivany.....	141	03 – 10	Polyphenolic Compound of Figs Fruit (<i>Ficus carica</i>) Prevents Atherogenesis via MDA (Malondealdehyde) and TNF-α (Tumor necrosis Factor) in High-fat-diet Induced among Male <i>Rattus novergicus s. wistar</i> Retty Ratnawati, Ciptati, Lesiana Puspa Dewi, Harnanik Puji Riswati, Nurul Laili Nahlia, Dendri KusumaPurborisanti and Nurdiana Rahmadani	155
03 – 15	Bioanalytical Method Development and Validation for the Determination of a Curcuminoid Analogue in Rat Plasma and Its Application to Pharmacokinetic Studies Yu Zhao Lee, Lee Ming-Tatt, Chau Ling Tham, Nordin Hj Lajis, Mohd-Roslan Sulaiman, Daud A. Israf	142	03 – 11	<i>In Vitro</i> and <i>In Vivo</i> Testings of ¹⁷⁷Lu-DOTA-Nimotuzumab, a Potential Radioimmunotherapeutical Agent of Cancers Martalena Ramli, Cecep Taufik Rustendi, Muhammad Subur, Cahya Nova Ardiyatho, Karyadi, Sri Aguswarini, Titis Sekar Humani and Rien Ritawidya	156
03 – 16	Mitochondria-targeted fluorescent probes with efficiency in photodynamic therapy S.Rimpelova, T.Briza, J.Kralova, K.Zaruba, Z.Kejik, P.Martasek, T.Ruml andV.Kral.....	143	03 – 12	The Collagen Peptide with Antioxidant, Inhibitor ACE (Angiotensin I-converting Enzyme) and Anti Cancer Activity Ace Baehaki, Maggy T.Suhartono, Sukarno, Dahrul Syah,Siswa Setyahadi, and Friedhelm Meinhardt.....	158
03 – 17	Transformation of Hepatitis B Surface Antigen into Local Banana Plants for Molecular Farming Vaccine Amy Estiati, Ade Nena,Ernawati A.Giri-Rachman, Putri Sandy Pangestu, Putri Dwi Utari, Ima Mulyama, andSony Suhandono.....	144			
Oral Poster Presentation: Cancer and Stem Cells		145			

04 – 14	Preparation of an Anti-Transferrin Receptor Immunoliposome for Tumor-Targeted Delivery System Wien Kusharyoto, Ira Handayani, Nova Dilla Yantiand Asrul Muhamad Fuad.....	159	05 – 05	Analysis of Sperm in Streptozotocin Induced Diabetic Rats Treated with Tocotrienol Rich Fraction (TRF) Daren Kumar, Siti Balkis Budin, Santhana Raj Louis and Jamaludin Mohamed....	173
04 – 15	The Role of Orphan G Protein-Coupled Receptor GPR55 in SKOV3 cells System Yellianty.....	160	05 – 06	Tocotrienol Rich Fraction Reduced Sperm Damage in Fenitrothion Treated Rats Siti Balkis Budin, Izzatus Shima Taib, Putri Ayu Jayusman, Rohi Ahmad Ghazali, Jamaludin Mohamed.....	174
04 – 16	Preliminary Study of FLT3 Internal Tandem Duplications (ITD) Mutation in Childhood Acute Leukemia Z Zefarina, Othman NAand H Rosline.....	161	05 – 07	Preliminary Study on Gene Expression of Hb Adana [α59(E8)Gly\rightarrowAsp(α2)] with -Alpha (3.7) Deletion inTwo Indonesian Patients: Qualitative and Quantitative Studies Ita M. Nainggolan, Alida R. Harahap, Hidayat Triamarsanto and Iswari Setianingsih.....	175
04 – 17	Prevalence Study of Human Papillomavirus in Indonesia with Dot blot-Hybridization Method for HPV DNA Genotyping Kasro H, Widjajahakim G, Kartawinata MM, Jenie IL, Nasar IM Cornain S.....	162	05 – 08	Analysis of C677T Methylenetetrahydrofolate Reductase Gene Polymorphism in Malaysian Ventricular Septal Defect Patients – A Preliminary Study Nur Afiqah Mohamad, Ramachandran Vasudevan, Patimah Ismail, Ahmad Fazli Abdul Aziz, Mazeni Alwi and Nur Ilyana Jaafar.....	176
04 – 18	Exploration of a siRNA Shuttle to Target Epidermal Growth Factor Receptor Expressing Cancer Cells Based on EGFR – Specific Nanobodies Noor Alfiah, Gang Chen, Peter Kronenberger, Erik Teugels and Jacques De Grève	163	05 – 09	Vitrification: The New Breakthrough for Human Embryo Freezing Natalia D, Jatnikasari S, Harlianto H, Djuwantono T and Permadi W.....	177
04 – 19	Morphological Changes and Cytotoxic Effect of Zingiber zerumbet Ethyl Acetate Extract on K562, Erythroleukemia Cell Line Asmah Hamid, Nor Fadilah Rajab and Saiful Ridzuan Karim.....	164	05 – 10	Neurodegeneration and Behavioral Effect in Sprague Dawley Rats inDifferent Subanaesthetic Dose and Exposure of Ketamine Mohamad MY, Abdel Wahab EN, Mohd Shafri MA, Muhammad N and Ahmad Kamaruddin S.....	178
04 – 20	Site-Directed Mutagenesis for the Production of Mutant TP53 Gene and Analysis of Its Tumor Suppressor Activity Zafirah Liyana Abdullah, Muhammad Taher and Solachuddin J.A.Ichwan.....	165	05 – 11	A Preliminary Study on Psychometric Properties of the BDI and ATQ Malay Versions among Tinnitus Patients Zainun Z, Geshina AMS, Mustapha M and Zakaria MN.....	180
04 – 21	Synthesis, Characterization and Crystal Structure of Organotin(IV) N-Butyl-N-Phenyldithiocarbamate Compounds and their Cytotoxicity in Human Leukemia Cell Lines Nurul Farahana Kamaludin, Normah Awang, Ibrahim Baba, Asmah Hamid and Chan Kok Meng.....	166	05 – 12	Possible Mechanisms of Action of <i>Acmella uliginosa</i> (Sw.) Cass. Methanol Crude Extract in Its Antinociceptive Activity Hui Ming Ong, Siti Nurulhuda Mastuki, Enoch Kumar Perimal, Tengku Azam Shah Tengku Mohamad, Ahmad Akira, Nordin Lajis, Daud Ahmad Israf and Mohd. Roslan Sulaiman.....	181
Oral Poster Presentation: Neuroscience and Human Genetics, Developmental Toxicology		168	05 – 13	Selenium, Zinc and Chromium Level in Hair And Nails Among Paddy Farmers Exposed to Pesticide in MADA, Perlis, Malaysia Ismarulyusda Ishak, Hidayatulfathi Othman, Nihayah Mohammad, Syarif Husin Lubis, Zariyantey Abdul Hamid, Nur Zakiah Mohd Saat, Mohd Jamil Rafeai, Ahmad Rohi Ghazali, Siti Nadia Mohd Nizam, Nooraisyah Mansoor, Marliana Samsir, Abd Rahim Salleh, and Robiah Lazim.....	182
05 – 01	Expression of Epiprostanoid EP3 Receptor in Nicotine Addicted Wistar Rats: Virgin Coconut Oil (VCO) Effects as Anti Addiction Dian Anggraeny, Anggraini Barlianand Kusnandar Anggadiredja.....	169	05 – 14	Aberrant Transcriptional Silencing of CTCF Gene in Glioma is Associated with Possible Post-Translation Modification Nurbainah Y, Shaharum S and Nik Norliza NH.....	183
05 – 02	Modifier Effect of δ Alad Gene Polimorphism on Lead Serum Level-Short Memory Relationship Lantip Rujito, Arini Dewi Setyawati, Saein	170	05 – 15	Involvements of Opiod Receptors In Boesenbergia Pandurata's Essential Oil (Bpeo)-Induced Antinociceptive Activity in Animal Model of Nociception Nor 'Adilah Makhtar, Wan Mastura Shaik Mossadeq, Goh Yong Meng, Mohd Roslan Sulaiman, Tengku Azam Shah Tengku Mohamad, Mohd Nadeem Akhtar,Jacklin Suloon, Noor Azlina Abu Bakar, Nur Izzati Ismail, Mohd Nasier Kamaldin and Lee Ming Tatt.....	184
05 – 03	α-4 Subunit (CHRNA4) rs2236196 Polymorphism of nicotinic Acetylcholine Receptor (nAChR) Gene among Malay Smokers Nur Iwani Abd Rozak,Imran Ahmad, Harmy Mohd Yusuff and Ruzilawati Abu Bakar.....	171			
05 – 04	Micronucleus Analysis among Farmers Exposed to Pesticides in Bachok And Pasir Puteh, Kelantan, Malaysia Asmah Hamid, Nor Fadilah Rajab, Kholilul Syafiq Baharuddin, Zariyantey Abdul Hamid, Ahmad Rohi Ghazali, Syarif Husin Lubis, Ismarulyusda Ishak, Nur Zakiah Mohd Saat, Nihayah Mohammad, Mohd Jamil Mohd Rafeai and Mohamad Roff Mohd. Noor.....	172			

Conference Program

Monday, 27th February 2012

Time	Agenda	Speaker / Institution
08.00-08.40	Registration	
08.40-08.50	Welcoming speech	Dean of SITH
08.50-09.00	Opening Ceremony	Rector of ITB
09.00-09.40	Prospect and Challenge in Biomedical Research	Prof. Dr. Amin Soebandrio (Ministry of Research and Technology - Indonesia)
09.40-10.00	Coffee Break (Aula Barat dan Timur)	
10.00-10.30	Research in Biomedical Science: an Indonesian Perspective	Prof. Dr. dr. Irawan Yusuf (Member of Indonesian Academy of Sciences - Indonesia)
10.30-11.15	Tropical Infectious Disease	Prof. Bernd Helms (Utrecht University – The Netherlands)
11.30-11.50	Tropical Infectious Disease	Dr. Claire Lesieur (CNRS - France)
11.50-12.10		Dr. Dora V. Kaloyanova (Utrecht University – The Netherlands)
12.10-12.30		Dr. Debbie S. Retnoningrum (ITB - Indonesia)
11.30-11.50	Tropical Infectious Disease	Prof. Timothy R. Hirst (Gamma Vaccine - Australia)

05 – 16	Validity and Reliability of the Malay Version Modified Vertigo Symptom Scale (MVMVSS) Z Zuraida, C A Mohd Riduan, Z and Mohd Normani.....	186
05 – 17	Development of Intelligent Prosthesis Arm Using Electromyography Signal Behavior Zunaidi Ibrahim	187
05 – 18	Comparative Studies of Purkinje cell Using Harris and Mayer's Hematoxylin in Brain Tissues Yanti Rosli	188
05 – 19	The Inhibition of Hypothalamic POMC Neurons by μ-opioid Receptor Coupled to K_{ATP} Channel Activity Using Patch-clamp Techniques <i>in vitro</i> Nurhadi Ibrahim	189
05 – 20	Physiological Effect of Magic Mushroom (Psilocybesemilanceata) Based on EEG of the Brain Function: Safety and Toxicity Ricardo Adrian Nugraha and Yogi Agung Prima Wardhana.....	190
05 – 21	Genotoxic Effects of Cadmium (Cd) to The Cells in Testes of Adults Male SW Mice (<i>Mus Musculus L.</i>) Duwita C.T. Maizir and Ayda T.Yusuf	191
05 – 22	Hormone Level and Physiological State As Indicators for Distress Level of Male ITB Students Who Passed Undergraduate Final Exam Duwita C.T. Maizir, Lulu Lusianti Fitri and Sri Wachyuni.....	192
05 – 23	Comparison of Brain Wave Electric Potential Distribution in Two Conditions: Watching in 2D and 3D Visual Galih RF Suwandi, SN Khotimah, SY Kim and JE Lee.....	193
05 – 24	Genistein Affects Dopaminergic Neuron and Aromatase Expression in Early Development of Zebrafish Habiba Aurora, Retty Ratnawati, Setyawati Soeharto and Mitsuyo Kishida.....	194
05 – 25	Role of GI Acupuncture on Reducing Stress Level of Male ITB Students Indicated by Alfa Brainwave One Day Prior to Final Exam Erlangga Bintang Praditya, Lulu Lusianti Fitri and Suprijanto.....	195

04-03

Human Papilloma Virus Genotype and the *IFNG* Susceptibility among Cervical Cancer Patients in Bandung

Edhyana Sahiratmadja^{1,2*}, Ani Melani Maskoen², Ramdan Panigoro¹, and Herman Susanto³

¹Dept. of Biochemistry, Faculty of Medicine Universitas Padjadjaran, Bandung

²Health Research Unit, Faculty of Medicine Universitas Padjadjaran, Bandung

³Dept. of Obstetrics and Gynecology, Faculty of Medicine Universitas Padjadjaran / Hasan Sadikin Hospital, Bandung Indonesia

*Corresponding authors: edhyanas@yahoo.com

Abstract Several Persistent infections by high-risk types of human papillomavirus (HPV) have been established as the etiological agent of cervical cancer, with the most prevalent types are HPV-16 and HPV-18. There is a strong evidence that the defense mechanism to HPV is a local response. The majority of the women will clear the infection without overt clinical disease. Those who develop lesions mount an effective cell mediated immune response, and hence the lesions will regress. Interferon gamma (IFN- γ) is one of the key regulatory cytokines that influence the HPV clearance. The IFN- γ production may be impaired by the *IFNG* gene dysfunction leading to the cervical malignant progression. The distribution of *IFNG* +874T/A polymorphism in gene susceptibility to cervical cancer was analysed. Interestingly, geographical variation in HPV genotypes might have impacted for designing diagnostic tests and vaccine, therefore, early HPV infection detection may minimize the risk of cancer development. However, it has been taken into account that the tests available might yield a different genotype distribution in the population. Our study showed a different result of two commercial kits. In a poor resource area where HPV genotyping is expensive, a cheaper alternative for HPV genotyping detection might have a beneficial impact.

Keywords: Cervical cancer, HPV genotypes, *IFNG* +874 T>A