



The Indonesian Society for  
Biochemistry and  
Molecular Biology

The 22<sup>nd</sup> National Seminar of ISMB &  
International Seminar on Biochemistry and Molecular Biology

# ABSTRACT BOOK



**UNIVERSITAS SAM RATULANGI**  
**9-10 NOVEMBER 2017**

**Timetable International Seminar of the Indonesian Society for  
Biochemistry and Molecular Biology 2017**

**Thursday, November, 9<sup>th</sup> 2017**

Time	
07.30-08.30	Registration
08.30-09.05	Opening Ceremony
	Kabasaran Dance
	National Anthem Indonesia Raya
	Opening speech by Chairman of the Committee Janno B. B. Bernadus, dr. M.Biomed.
	Opening speech by Rector of Sam Ratulangi University
	Opening speech by President of ISBMB
	Opening speech by Governor of North Sulawesi
	Opening formally by Governor, Rector and ISBMB President.
09.05-09.15	Appreciation to the Sponsors and Seniors
09.15-09.30	Coffee break
	<b>Keynote Speaker</b>
	<b>Moderator: Carla F. Kairupan, dr., PhD</b>
09.30-10.00	Wolfgang Nellen, Prof. Dr. (Germany)
10.00-10.30	Ni Nyoman Tri Fuspansih, Prof., Dr., Dra.,M.SI (Indonesia)
	<b>Plenary Session I</b>
	<b>Moderator: Faky Mantri, Ir., MSc., PhD</b>
10.30-11.00	Neni Nurainy, Dr (Indonesia, PT Biofarma)
11.00-11.15	Discussion
11.15-11.45	Hanafi Damanhuri, PhD (Malaysia)
11.45-12.15	Charleen Joyce Usadhin (Philippine)
12.15-12.45	Simab Kanwal, PhD (Pakistan)
12.45-13.00	Discussion
13.00-13.45	ISHOMA
13.45-16.45	Workshop: Molecular Docking / Bionimic
	Oral presentation
	Poster Presentation

**Friday, November, 10<sup>th</sup> 2017**

Time		
07.45-08.15	Registration	
	<b>Plenary Session II</b>	
	<b>Moderator: Rondang Soegianto, Prof., Dra., MS., PhD</b>	
08.15-08.45	Bimo Ario Tejo Assoc. Prof., Dr. (Malaysia)	
08.45-09.15	Rahmawati Ridwan, Dr., MS., Apt. (Indonesia)	
09.15-09.30	Discussion	
09.30-09.45	Coffe Break	
	<b>Plenary Session III</b>	
	<b>Moderator: I Made Artika, Dr., Ir., MAppSc</b>	
09.45-'0.15	Mohamad. Sadikin Prof., dr., DSC. (Indonesia)	
10.15-'0.45	Debbie Retnoningrum, Dr., M.Sc., Apt. (Indonesia)	
10.45-'1.15	Fatimawali, Prof. Dr., M.Si. (Indonesia)	
11.15-'1.30	Discussion	
11.30-'13.00	ISHOMA	
13.00-'13.20	Sentra Diagnostk Dinamika	
13.20-'13.30	Discussion	
13.30-'15.00	Oral presentation	
	Poster presentation	
15.00-'17.00	Closing Ceremony	

**Timetable for Oral Presentation at International Seminar of the  
Indonesian Society for Biochemistry and Molecular Biology 2017**

**DAY 1 Thursday, November 9<sup>th</sup> 2017**

**Room 1**

Moderator: dr. Carla F. Kairupan, PhD

No.	Time	Name of Author	Title of Paper
1	13.45 – 14.00	Andri Pramono	In Vitro Test Of Tobacco Extract Oils (Nicotiana tabacum L. var Virginia) With Reflux Isolation Method Against Nosocomial Bacteria Pathogen
2	14.00 – 14.15	Ismul Bahiyih	Antifungal Activity of Sasating (Cassia alata Linn.) Leaf Ethanol Extracts against Trichophyton Rubrum
3	14.15 – 14.30	Tirza Sosanta	Antibacterial Activity of Masisin ( <i>Rhodomyrtus tomentosa</i> Wight.) Ethanol Extracts against <i>Vibrio cholerae</i>
4	14.30 – 14.45	Adam Satria Rakatama	The Antifungal Inhibitory Concentration Effectiveness Test From Ethanol Seed Arabica Coffee ( <i>Coffea arabica</i> ) Extract Against The Growth Of <i>Candida albicans</i> Isolate From Patient With In Vitro Method
5	14.45 – 15.00	Haryanto Raharjo, L	Effect of Infusion Mangosteen Peel ( <i>Garcinia mangostana</i> L) to Activity of $\gamma$ -GT Serum, Total of Pachytene Spermatocytes and Number of Sertoli Cells in Seminiferous Tubules
6	15.00 – 15.15	Yustin' Aloes	The Difference in The Effectiveness of Propolis and Triamcinolon Acetonide in Traumatic Ulcer Healing In Mucosa of The Oral Cavity
7	15.15 – 15.30	Akhmad Endang Zainal Hasan	Molecular Docking Analysis of Selected Temulawak ( <i>Curcuma xanthorrhiza</i> ) Constituents as Anticancer Candidate of Drug with Histone Acetyltransferase
8	15.30 – 15.45	Zulmaeta	Effect Of Alpha Mangostin To Soluble Endoglin On Trophoblast Cell Induced By Preeclamy



9	15.45 – 16.00	Soraya Rahmanisa	The Protective Effect Of The Combination Of Zinc And Tomatoes ( <i>Solanum lycopersicum</i> L) Against Liver Histology Of <i>Rattus norvegicus</i> Sprague dawley Exposed By Electromagnetic Handphone Waves
10	16.00 – 16.15	Linda Rosalina	Neuroprotective Effect of Catechins Gambier On Beta Amyloid Plasma and Cognitive Dawley Sprague as Model of Alzheimer

## Room 2

Moderator: dr. Diana Vanda Doda, MOHS, PhD

No.	Time	Name of Author	Title of Paper
1	13.45 – 14.00	Masfufatun	The Antigenic Proteins Profile of <i>Candida albicans</i> Biofilms As Candidate Biomarkers for <i>Candidiasis</i> Diagnosis
2	14.00 – 14.15	Retno Handajani	Detection Of Infection and Genotype Of Hepatitis B Virus (HBV) On Patients In Hepatology Outpatient Clinic, Dr. Soelomo General Hospital, Surabaya
3	14.15 – 14.30	Notopuro Harianto	The Difference in Initial Leukocyte Count, Bone Marrow Blast Cell Count and CD34 Expression In Patient With Acute Myeloid Leukemia With and Without NPM1 Exon 12 Gene Mutation
4	14.30 – 14.45	Nuzulia Irawati	The Association Between The Number of CD4 Cells With <i>Cryptosporidium</i> sp. Infection On HIV/AIDS Patient at Dr. M. Djamil Hospital Padang
5	14.45 – 15.00	Aris Purwantoro	Molecular Diagnosis of Livestock Toxoplasmosis
6	15.00 – 15.15	Reni Paramita	Antioxidant Enzymes Specific Activity In Early and Late Preeclampsia Placental Tissue
7	15.15 – 15.30	Ngadikun	Pattern of EDTA-blood Spectrum in Ovarian Cancer Patients: A Novel Biomarker
8	15.30 – 15.45	Maria Swastika	Modeling Red Blood Cells with Glucose-6-phosphate

			Dehydrogenase (G6PD) Deficiency in vitro
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<p>1. Patient's name: [Faint text]</p>	<p>2. Date of birth: [Faint text]</p>	<p>3. Sex: [Faint text]</p>	<p>4. Referral source: [Faint text]</p>
<p>5. Clinical history: [Faint text]</p>	<p>6. Physical examination: [Faint text]</p>	<p>7. Laboratory tests: [Faint text]</p>	<p>8. Results: [Faint text]</p>
<p>9. Interpretation: [Faint text]</p>	<p>10. Recommendations: [Faint text]</p>	<p>11. Date of test: [Faint text]</p>	<p>12. Signature: [Faint text]</p>
<p>13. Additional notes: [Faint text]</p>	<p>14. [Faint text]</p>	<p>15. [Faint text]</p>	<p>16. [Faint text]</p>
<p>17. [Faint text]</p>	<p>18. [Faint text]</p>	<p>19. [Faint text]</p>	<p>20. [Faint text]</p>
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<p>29. [Faint text]</p>	<p>30. [Faint text]</p>	<p>31. [Faint text]</p>	<p>32. [Faint text]</p>
<p>33. [Faint text]</p>	<p>34. [Faint text]</p>	<p>35. [Faint text]</p>	<p>36. [Faint text]</p>

9	15.45 – 16.00	Febriana Catur Iswanti	IFN Gamma and IL-13 Comparison of Human Peripheral Blood Mononuclear Cells Stimulated by CpG ODN2005x3_PD Using Chitosan Nanoparticles Delivery
10	16.00 – 16.15	Elmatris Sy	Identification of Mercury Influence On Face Breast Cream Night Lunch Registraton and No Registration of Basic Proposed In The Padang Railway Market

### Room 3

Moderator: dr. Angelina S.R. Masengi, MBIomed

No.	Time	Name of Author	Title of Paper
1	13.45 – 14.00	Taufik Hidayat	Genetic Polymorphism Of Aldehyde Dehydrogenase 2 (ALDH2) Of Minangkabau Ethnic Group
2	14.00 – 14.15	Wayan Tianing	ND3 Mitochondrial Polymorphism G-10369-A And C-10401-T Significantly Associated With Elevated Serum 8-OHdG Concentration And Increased Risk Of Malignant Behavior n Breast Cancer
3	14.15 – 14.30	Ika Agus Rini	Variant Analysis of Long Control Region Human Papillomavirus Genotypes 58 and 59 Isolates from Bandung, Indonesia
4	14.30 – 14.45	Medania Purwaningrum	Pathotyping Of Newcastle Disease Local Isolate Virus In Poultry By Reverse Transcription Polymerase Chain Reaction And Restriction Endonuclease Analysis Method (RT-PCR And REA)
5	14.45 – 15.00	Linawati Hananta	The Prevalence of Polymorphisms Cytochrome P450 (CYP2B6) Gene In Malaria-Endemic Population of Eastern Indonesia
6	15.00 – 15.15	Josephine E. Siregar	Mitochondria as an antimalarial drug target in the screening of Indonesian biodiversity: Plasmodium berghei atovaquone-resistance as a model

7	15.15 – 15.30	Wayan Tunas, Artama	Amplification of gene responsible for MDR and Molecular Cloning of Antigen 85 A (Ag 85 A) of Mycobacterium tuberculosis isolated from MDR -TB patient
8	15.30 – 15.45	Evira Puticahya	Co-inheritance of Alpha and Beta-thalassemia In Indonesian Population: The Highly Unstable Hb Adana and Midly Unstable Hb E
9	15.45 – 16.00	Sirtia Puspitasari	Hb Adana (Codon 59 mutation of $\alpha$ -globin gene (GGCgly $\rightarrow$ GACasp) Haplotype in $\alpha$ -Thalassemia Patients
10	16.00 – 16.15	Ita Margaretha Nainggolan	Analyzing Variant Alpha Globin Caused by Codon 59 mutation in $\alpha$ 2 Globin Gene Using Reverse-Phase High Performed Liquid Chromatography (RP-HPLC)

#### Room 4

Moderator: dr. Olivia A. Waworuntu, MPH

NO	Time	Name of Author	Title of Paper
1	13.45 – 14.00	Suhartat	Mechanism of Papaya Seed Ethanol Extract ( <i>Carica papaya</i> Linn.) on Glucose Transporter 4 (GLUT 4) of Muscle Tissue Rat ( <i>Rattus novergicus</i> ) in Diabetes Mellitus Type 2
2	14.00 – 14.15	Triawanti	The Potency of Swallow Nest ( <i>Colocalia fuciphaga</i> ) Water Extract to Prevent Kidney Damage Due to Diabetes Mellitus Through the Antiglycation Mechanism
3	14.15 – 14.30	Prasetyestuti	Hypoglycemic Effects of Saponin, Flavonoid and Alkaloid from <i>Swietenia Macrophylla</i> Seed in Streptozotocin Induced Diabetic Rats
4	14.30 – 14.45	Ismawati	The Effect of Alpha Lipoic Acid on VCAM-1 Expression in Type 2 Diabetic Rat



5	14.45 – 15.00	Grace Sanger	Antioxidant And Anti-Diabetic Effect Of Ethyl Acetic Extract On Edible Marine Algae ( <i>Halimena Durvillae</i> ) Collected From North Sulawesi Coastal Area Of Indonesia
6	15.00 – 15.15	Eti Yertzel	Effect of <i>Hylocerus Polyhizus</i> Extract On MDA Level and Catalase Activity In Hyperglycemia Rat White Strain Wistar
7	15.15 – 15.30	Sunarti	Relationship Between Body Fat And HOMA-IR In Individuals Type 2 Diabetes Mellitus After High Fibre Snack Consumption
8	15.30 – 15.45	Pramudji Hastuti	Polymorphism of Resistin Gene is Correlated with Obesity and Insulin Resistance In Indonesia
9	15.45 – 16.00	Evi Arfanti	NRF2 Signalling Is Activated During The Early Stages Of Accelerated Diethylnitrosamine-Induced Hepatocarcinogenesis With Obesity And Diabetes
10	16.00 – 16.15	Eryati Darwin	The Relationship Of Testosterone And Cortisol Level With Acne Vulgaris In The Adolescent Men
11	16.15 – 16.30	Rika Susanti	S100B Level Of Post Mortem Cerebrospinal Fluid and Serum In Blunt Head Trauma Cases

**DAY 2 Friday, November 10<sup>th</sup> 2017****Room 1**

Moderator: dr. Sylvia R. Marunduh, MMec

No.	Time	Name of Author	Title of Paper
1	13.30 – 13.45	Feky R. Mantiri	Ethanol leaf extract of <i>Pangium edule</i> increases high density lipoprotein levels in rats fed on cholesterol and fat enriched diet.
2	13.45 – 14.00	Bezaliel Naraziang	Description of Food Consumption Pattern On Pregnant Women In Manado City
3	14.00 – 14.15	Jessica G. Mogi	The Correlation Between Waist Circumference And Respiratory Rate On Teachers In Eben Haezar Christian Junior High 1,2 And Eben Haezar Senior High School Manado
4	14.15 -14.30	Nelly Mayulu	The Level Of Tumor Necrosis Factor and Ferritin in School Age Children With Helminth Infection And Nutritional Disorders
5	14.30 – 14.45	Carla F. Kairupan	<i>Clerodendrum minahassae</i> leaf extract improves lipid profile in rats fed on cholesterol and fat enriched diet

**Room 2**

Moderator: Prof. Dr. Trina E. Tallei, MSI / dr. Grace L. Turalaki, MKes

No.	Time	Name of Author	Title of Paper
1	13.30 – 13.45	Rahmat Azhari Kemal	Trends in Synthetic Biology Application for Diagnostics: Analysis from IGEN 2016 Competition
2	13.45 – 14.00	Syaefudin Ali Akhmad	Biomarker's Discovery Strategy for Spirituality
3	14.00 – 14.15	Meitria Syahadalina Noor	Serum Progesteron Induced Blocking Factor (PIBF) Level In Mus Musculus As Endothelial Dysfunction Model And Given Mild Regular Exercise

4	14.15 -14.30	Dian Mulawarmanti	The Level Of Malondialdehyde And Catalase Activity On Saliva Wistar Rats Treated By Grey Mangrove Extract After Induction Of Mixed Periodontopathogen Bacteria
5	14.30 – 14.45	Ahmad Hamim Sadewa	Analysis of SMN1 and NAIP genes of patients with spinal muscular atrophy in Dr. Sardjito Hospital, Yogyakarta, Indonesia

### Room 3

Moderator: dr. Janette M. Rumbajan, PhD

No.	Time	Name of Author	Title of Paper
1	13.30 – 13.45	Eko Suhartono	Potential Antimetabolotoxic Extract of Kelakai ( <i>Stenochlaena palustris</i> ) on Hepar-Pb induced
2	13.45 – 14.00	Trini Susmiati	Effect Of Curcuminoid Extract Temulawek In Inhibited The Formation Of Cholesterol And Triglyceride In White Red
3	14.00 – 14.15	Indria Hafizah	Traditional Alcoholic Beverages from Southeast Sulawesi (Kameko And Pongasih) Effects on Triglyceride Levels in Mice
4	14.15 -14.30	Dimas Andrianto	Glucosamine hydrochloride isolation and Identification from <i>Achatina Fulica</i> Shell
5	14.30 – 14.45	Ari Widiyantoro	Secondary Metabolites from Leaves of <i>Lygodium circinnatum</i>

**Room 4**

Moderator: Vanda Kamu, SPd, MSI

No.	Time	Name of Author	Title of Paper
1	13.30 – 13.45	Aris Haryanto	Molecular Subcloning and Expression of Recombinant Fusion (F) Protein of Newcastle Disease Virus (NDV) from Local Isolates
2	13.45 – 14.00	Desak Made Wihandani	Expression Profile of Stromal Caveolin-1 and Its Association with Clinicopathological Parameters in Luminal Type Breast Cancer in Sanglah General Hospital, Bali, Indonesia
3	14.00 – 14.15	Nina maniar	Biosurfactant Rhamnolipid Optimization Using Device Genetic Mechanism
4	14.15 -14.30	Trini Suryowati	Identification of chemical and bioactive compound of Etilingera elatior stems by GCMS Analysis
5	14.30 – 14.45	Ani Retno Prjanti	Glutathione concentration in liver and plasma after different duration clove treatment on Carbon tetrachloride induced rat



**Poster Presentation at International Seminar of the Indonesian Society for Biochemistry and Molecular Biology 2017**

No.	Name of Author	Title of Paper
1	Dewi Ratih Handayani	Effect Of Ethanol Extract Of Avocado ( <i>Persea gratissima Gaertn</i> ) Leaves To Level Of Rat Gastric HCl That Induced By Acetylsalicylic Acid
2	Gwenny Ihsan Prabowo	Analysis of Association between Ser704Cys Single Nucleotide Polymorphisms DISC1 Gene and Clinical Symptoms of Chronic Schizophrenia Patients in Psychiatry Unit of Dr. Soetomo Hospital Surabaya
3	Indeswati Diyatri	The Expression Of Tumor Necrosis Factor- $\alpha$ with Rat Bone Marrow Stem Cell on Rats ( <i>Rattus norvegicus</i> ) with Periodontitis
4	Tati Kristianti	p19 Gene Insertion Into pCAMBIA-FPS Expression Vector In Order To Enhance The Transient Expression Of Artemisin
5	Andi Noor Kholidha Syarifin	Association of KCNJ11 E23K Gene Polymorphism with Type 2 Diabetes Mellitus in Kendari City
6	Belinda Sentosa	Phytochemical Screening, Cytotoxicity, and Antioxidant Capacity of <i>Crescentia cujete</i> Leaf Extract
7	Rizky Putri	Antioxidant Capacity, Flavonoid Content, Cytotoxicity and Phytochemical Analysis of <i>Aegle marmelos</i> Fruit Extract
8	Ferdian Gunawan	Phytochemical Analysis, Antioxidant Capacity, and Cytotoxicity of <i>Ficus auriculata</i> L. Leaves and It's Effect Towards Sprague-Dawley Lungs Induced by Chronic Systemic Hypoxia
9	Frans Ferdinal	Hypoxia-induced Oxidative Stress: Plasma Levels of Apelin-36 and Cardiac Remodeling

10	Jessica Gracia	Antioxidant Capacity, Phytochemical Screening, Cytotoxicity and Oxidative Stress on Rat's Liver Induced by Chronic Systemic Hypoxia After Administration of <i>Ficus auriculata</i> L. Leaf Extract
11	Karinnia	Comparison of Oxidative Stress Biomarkers between Day-1 and Day-21 of Menstrual Cycle in Mild Acne Vulgaris Subjects: A Study Based on Premenstrual Acne Flare
12	Kevin Jonathan	The Effect of Hypoxia on MDA, GSH and Catalase Levels in Heart and Blood of Sprague Dawley after the Administration of <i>Auricularia polytricha</i> Water Stew
13	Melanie Salim	Phytochemical Screening, Antioxidant Capacity, and Cytotoxicity from <i>Ficus auriculata</i> L. Leaf Extract and its Effect on Rat Heart induced by Chronic Systemic Hypoxia
14	Leonard Khuana	Evaluation of Antioxidant, Cytotoxicity and the Influence of Tin Juice on GSH Levels Induced by Chronic Systemic Hypoxia
15	Mita Sarjaya	Antioxidant Components, Cytotoxicity and Effect of Fig Fruit to Specific Catalase Enzyme Activity in Heart, Brain, Kidney, Lung, and Liver Sprague Dawley rats Induced by Chronic Systemic Hypoxia
16	Nikolaus Ronald K.	Antioxidant Activity Induced by Chronic Systemic Hypoxia in Brain and Blood of Sprague Dawley after the Administration of <i>Auricularia polytricha</i> Water Stew
17	Sura, Singh	Antioxidant Capacity, Cytotoxicity and the effects of <i>Ficus carica</i> L. Fruit Juice on Protein Carbonyl Content of Chronic Systemic Hypoxia induced Sprague-Dawley

18	Novi Silvia Hardiany	TNF-Related Apoptosis-Inducing Ligand (Trail) mRNA Expression In Glioblastoma Multiforme Cells Treated By Conditioned Medium of Umbilical Cord-Derived Mesenchymal Stem Cells
19	Hamdiah Sri Supriati	The Identification of Component Extract Ethanol, Chloroform and N-Hexane From Saga Seed ( <i>Abrus precatorius</i> , L)
20	Aatje E. Manampiring	Microbiology Identification And 16SrRNA Gene Analysis of Mercury Resistant Bacteria Isolated From Urine Patient With Dental Amalgam
21	Billy J. Kepel	Transformation and Characterization of Organomercury Liase Gene of <i>Pseudomonas</i> sp Isolate 4B2
22	Ari Widiyantoro	Cytotoxic Compounds from Rhizome of <i>Etingera elatior</i>
23	Carla F. Karupan	Hepatoprotective Activity of Clove ( <i>Syzygium aromaticum</i> ) Leaf Extract on Paracetamol-Induced Liver Damage in Rats
24	Eko Suhartono	SCN-MPC-H <sub>2</sub> O <sub>2</sub> System In Smoker and Non Smoker Saliva
25	Ana Medawati	Cytotoxic test of ethanol extract sambiloto ( <i>andrographis paniculata</i> (burn. F.) Nees) on raj cancer cell in vitro
26	Arta Farmawati	Potential utilization of klutuk banana ( <i>Musa balbisiana</i> Colla) flour for children with malnutrition (Study of nutrient content of klutuk banana)
27	Dwirini Retno Gunarti	Enzyme-Labeled Protein Ligan Spesifik Binding Assay (ELPLSBA) As An Alternative For Elisa (Enzyme Link Immunosorbent Assay)
28	Fifi Fitriyah Masduki	Cloning and Expression of yeast optimized <i>Artemisia annua</i> Amorphadiene Synthase (ADS)

		In <i>Saccharomyces cerevisiae</i> for Production of Sem—Synthetic Artemisinin
29	Tasriiri	C3435T polymorphism of ABCB1 gene in ovarian cancer patients in RSUP dr. Sardjito Yogyakarta
30	Anlan Sangkal	Fabrication and Micro Structure Analysis of Activated Carbon From Coconut Shell Charcoal
31	Ineke F.M. Rumengan	Laboratory Cultivation and Molecular Analysis of Partial CAO Protein of <i>Prochloron didemni</i> Isolated From <i>Lissoclinum patella</i> of Manado Bay, North Sulawesi
32	Herlina Wungouw	The Obedience of Taking Medicine and the Level of HbA1c of Diabetic Patients
33	Hijran Asikin	Adaptive responses in spleen macrophages of SRBC-immunized mice as indicated by Peroxisome Proliferator Activated Receptor Gamma Coactivator (PGC)-1 $\alpha$



## CURRICULUM VITAE

### **Wolfgang Nellen**

born 16. September 1949 in Velbert, Germany

#### **Education:**

Studied biology at Düsseldorf University (Diploma: 1975, Dr. rer. nat.: 1980)

1979 to 1982 Postdoctoral position, Inst. of Physiol. Chem. (Univ. Marburg).

1982 to 1986 Res. Assistant (Univ. California, San Diego)

1986 to 1995 Res. Group leader (Max-Planck-Inst. Biochemistry, Mertinsried,)

1989 to 1995 Lecturer Department of Zoology (Universität München)

1989 Lecturer at Yarmouk University, Irbid, Jordan, for 1 month.

1994 Lecturer at the University of Hokkaido, Sapporo, Japan for 1 month

1995 appointed full Professor for Genetics, Universität Kassel

1999 visiting Scientist, University of Uppsala, Sweden

Since 2010 short term lecturer at Andalas University and Brawijaya University in the frame of the IGN-TTRC university partnership program of the DAAD

April 2015 retired from active research and teaching at Kassel University

Since June 2015 Johann Gottfried Herder Fellow of the DAAD and guest professor at Brawijaya University, Malang, Indonesia

#### **Administration:**

Was:

Director of Institute of Biology Kassel University,

Dean of Faculty Biology/Chemistry, Kassel University

Member of various committees for ethics in science, animal welfare, gene technology safety, education and funding.

#### **Professional Societies:**

Past:

Vice President and President of German Genetics Society (VBIO)

Vice President and President of German Biologist's Society

President of Society for Natural Sciences and Medicine, Kassel

Current:

Founder and President of Science Bridge Board member of German Genetics Society

Spokesman German Biologist's Society (VBIO) LV Hessen

Member of advisory board Max Planck Inst. For terrestrial microbiology

Board member of various scientific journals

## **Description of Food Consumption Pattern on Pregnant Women in Manado City**

**B. Narasiang<sup>1</sup>, N. Mayulu<sup>1</sup>, S. Kawengian<sup>1</sup>**

<sup>1</sup>Department of Nutrition, Faculty of Medicine of Sam Ratulangi University, Manado  
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### **ABSTRACT**

Pregnancy is a critical time or a golden period of the brief human growth and development time, a part of the Window of Opportunity which affects the maternal and fetal health. Throughout the first phase of pregnancy, pregnant women need more food intake, accurate eating pattern, and also a balanced macronutrient intake. An adequate intake of food is very important to support the physical health and development of fetal mental health also decrease the risk of pregnancy complications. This study aims to get the full description of food consumption pattern on pregnant women in Manado City. This study uses a descriptive study method a cross sectional design using Food Frequency Questionnaire (FFQ) to collect data of pregnant women in 5 public health centers in Manado City on September-October 2016. Based on the FFQ data given by 181 respondents, the carbohydrate consumption of pregnant women in Manado City is by 159,97gr/ day, protein by 79,15gr/ day, and fat by 124,74gr/ day. The commonest food which is also eaten the most often is rice (carbohydrate), saltwater fish (protein), and coconut oil (fat). While chicken is a food that is rarely consumed (81,22%) and eel is a food that has never been consumed by pregnant women in Manado City (100%). Pregnant women in Manado City has a food pattern that lacks in carbohydrate and high in fat according to pregnant women Recommended Dietary Allowances (RDA) in Indonesia.

**Keywords:** pregnant women, food pattern, food frequency questionnaire

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# The 22<sup>nd</sup> National Seminar of ISBMB & International Seminar on Biochemistry and Molecular Biology

Application of Biochemistry and Molecular Biology on Drug Discovery and Advanced Diagnostics

Sam Ratulangi University, Manado, Indonesia 9-10 November, 2017

## Certificate

This is to certify that

**Nelly Mayulu**

has successfully participated

as

**Oral Presenter**

President of ISBMB,



Dr. Dra. Rahmawati Ridwan MS, Apt

Organizing Committee,  
Chairman,

dr. Janno B. B Bernadus M.Biomed