

Undangan Seminar ICMR 2014

From: Prof Nurhayati (nurhayati@uisu.ac.id)

To: dewikarlina@yahoo.com; rma_fispro@yahoo.com; wahyunisitti08@yahoo.com; rahmahjohar@fkip.unsyiah.ac.id; farhanayyash@gmail.com; melvasilitonga2013@gmail.com; t.restuati@gmail.com; noveritasitumorang@yahoo.com; rosnani.unsyiah@gmail.com

Date: Tuesday, July 8, 2014 at 03:37 PM GMT+7

Kepada : Yth. Bapak/Ibu Dosen
di
tempat

Assalamu'alaikum wr. wb, salam sejahtera untuk kita semua.

Dengan hormat. Semoga Bapak/Ibu Rektor berada dalam keadaan sehat wal afiat dan sukses menjalankan tugas sehari-hari. Amin.

Sehubungan dengan akan dilaksanakannya Seminar Internasional Multidisiplin Ilmu (iCMR) pada tanggal 16 – 18 Oktober 2014 dengan tema “Melalui Konferensi Internasional Kita Bangun Sinergisme Berbagai Bidang Ilmu Pengetahuan dan Teknologi Untuk Kualitas Hidup Yang Lebih Baik (*Through International Conference We Build Synergism among Various Fields of Science and Technology for the Betterment of Human Life*)” dimana Universitas Islam Sumatera Utara bertindak sebagai penyelenggara. Maka dengan ini kami berharap Bapak/Ibu Rektor dapat mengirim utusan dari Perguruan Tinggi yang Bapak/Ibu pimpin untuk berpartisipasi dalam seminar tersebut.

Informasi selanjutnya bisa diperoleh pada laman <http://icmr2014.uisu.ac.id/> atau email ke nurhayati@uisu.ac.id.

Demikian hal ini kami sampaikan. Atas perhatian dan kerja samanya diucapkan terimakasih.

Wassalamu'alaikum wr.wb.

Sekretaris Panitia Pelaksana

Prof. Dr. Ir. Nurhayati, MP



Brosur IMCR 2.jpg
1.9MB



Brosur IMCR.jpg
1.7MB

**ICMR
UISU
2014**

Application Form

PLEASE TYPE DETAILS BELOW and send your CV

Full Name : _____
 Gender (M/F) : _____
 Institution : _____
 Country : _____
 City, State, Zip : _____
 Phone : _____
 Mobile / Cell : _____
 Email : _____
 Paper Title : _____

Register As :

Oral Presentation
 Poster
 Public Participant

icmr2014.uisu.ac.id

HOTELS AND VISA

If the participants and the presenters are interested to stay in Madani Syariah Hotel (★★★★) (Venue of Conference), the conference committee may help book the hotel rooms by sending the booking fee in the following rates.

Superior Room : 450,000 IDR
 Deluxe : 600,000 IDR
 Executive : 700,000 IDR

If they are interested to stay in near-by hotels :

Swissbell (★★★★)	: S. Parman Street No 217, Medan, 4 km from location
Grand Antares (★★★★)	: Sisingamangaraja Street No 328 Medan, 1 km from location
Antares (★★★)	: Sisingamangaraja Street No 84 Medan, 300m from location
Garuda Plaza (★★★)	: Sisingamangaraja Street No 18 Medan, 300 m from location
Grand Delta (★★★)	: Juanda Baru no 3C Street Medan, 500 m from location
Soechi (★★★★★)	: Cirebon no 76 Street Medan, 500 m from location

No need Visa application for participants from Malaysia and Thailand. Some countries are also eligible for Visa on Arrival (VOA), please kindly visit : <http://kemlu.go.id/pages/servicedisplay.aspx?IDP=7&IDP2=21&Name=ConsularService&l=id>

**The 3rd International
Conference on
Multidisciplinary
Research
2014**



16 - 18 October 2014

The Conference is jointly organized by Universitas Islam Sumatera Utara (UISU) Medan, Universitas Syiah Kuala (UNSIAH) Banda Aceh and the School of Distance Education, Universiti Sains Malaysia (USM) Penang Malaysia.

**ICMR
UISU
2014**



The 3rd International Conference on Multidisciplinary Research 2014



16 - 18 October 2014

INTRODUCTION

The Conference is jointly organized by Universitas Islam Sumatera Utara (UISU) Medan, Universitas Syiah Kuala (UNSYIAH) Banda Aceh and the School of Distance Education, Universiti Sains Malaysia (USM) Penang Malaysia.

The main objective of this conference is to provide a platform for researchers to share research results in various fields. It is hoped to improve the culture of research and collaboration among scholars and researchers. This seminar may also increase mutual understanding among the participants from various different countries. International Conference on Multidisciplinary Research 2014 will be a platform for academicians to share their findings and build a bridge for the synergism among various fields of science and technology for the betterment of human life.

CONFERENCE TOPICS

The theme of this international conference is "Through International Seminar We Build Synergism among Various Fields of Science and Technology for the Betterment of Human Life". The conference will focus on various aspects of research engaged in efforts to build synergism for the betterment of human life.

Call For Papers And Poster

The paper presented in the seminar could be on any of the following fields :

1. Sciences and Engineering
Computer, Information Technology and Communications, and Engineering
2. Bio-Sciences
Biology, Chemistry, Physics, Mathematics, Medicine, Health Sciences and Agriculture
3. (Applied) Social Sciences
Management, Economics, Accounting, Political Science, Law, and Education
4. Social Sciences
Religion, Language, Culture, Art, Philosophy, History, Geography, and Psychology

Please submit your abstract (a maximum of 500 words) and full paper (a maximum of 5 pages) to :

- Science (Teknik) : teknik-icmr@uisu.ac.id
- Science (Hayati) : hayati-icmr@uisu.ac.id
- Social : sosial-icmr@uisu.ac.id

For other inquiries, kindly contact :

- Prof. Nurhayati : nurhayati@uisu.ac.id
+628 1265 665 73
- Susi Eka Lestari : +628 1263 363 54

The accepted papers will be published in the conference proceeding only if at least one author is officially registered as a presenter.

CONFERENCE VENUE

Gelora Hall, Madani Syariah Hotel,
Jln. SM Raja, Medan, Indonesia

REGISTRATION

Participants are welcome from any profession: lecturers, researchers, students, practitioners, civil servants and all interested individuals.

Fees

Category	Early Bird (Before Sept. 1, 2014)	Normal (After Sept. 1, 2014)
International	150 USD	200 USD
International Student	100 USD	150 USD
National	500.000 IDR	800.000 IDR
National Student	300.000 IDR	500.000 IDR
Proceeding	200.000 IDR	
Lake Toba Tour	750.000 IDR	

IMPORTANT DATES

The closing date for abstracts submission	: 5 July 2014
Notification of abstract acceptance	: 26 July 2014
The closing date for submission of full papers	: 30 August 2014
Presenters registration deadline	: 30 August 2014
Date of conference	: 16-17 October 2014
Lake Toba Tour	: 17-18 October 2014

Transfer

Please transfer the registration fee to the conference bank account below:
 Account Number : 7344444441
 Beneficiary : Panitia Penyelenggara ICMR 2014
 Bank Name : Syariah Mandiri
 Cabang Aksara, Medan, Indonesia

icmr2014.uisu.ac.id

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UISU
2014**

Inform

From: Prof Nurhayati (nurhayati@uisu.ac.id)

To: Munajat.ub@gmail.com; ansor_riau@yahoo.co.id; Nilawatiandi@gmail.com; rma_fispro@yahoo.com; samsuri@uny.ac.id; dewisuhardianto@gmail.com; mariana_wahyudi@staff.ubaya.ac.id; Halim.daud87@gmail.com; lusi_utamaindo115@yahoo.co.id; nursulistyobudiambarini@gmail.com; ramli@unhas.ac.id; hamdani_umar@yahoo.com; azuarrizal@gmail.com; endangsihtri@yahoo.com; Hakim_hr@yahoo.com; irharyanimtp@yahoo.co.id; atik_wiryosentono@yahoo.co.id

Date: Thursday, August 28, 2014 at 01:29 PM GMT+7

Dear Participant please send your mobile phone for purposes of pick up at the airport later.

Best regard
Secretary

Prof. Dr. Ir. Nurhayati, MP

Information to all participant

From: Prof Nurhayati (nurhayati@uisu.ac.id)

To: Munajat.ub@gmail.com; ansor_riau@yahoo.co.id; Nilawatiandi@gmail.com; rma_fispro@yahoo.com; samsuri@uny.ac.id; dewisuhardianto@gmail.com; mariana_wahyudi@staff.ubaya.ac.id; Halim.daud87@gmail.com; lusi_utamaindo115@yahoo.co.id; nursulistyobudiambarini@gmail.com; ramli@unhas.ac.id; hamdani_umar@yahoo.com; azuarrizal@gmail.com; endangsihtri@yahoo.com; Hakim_hr@yahoo.com; irharyanimtp@yahoo.co.id; atik_wiryosentono@yahoo.co.id; hari911092@yahoo.co.id; ytunggabhimadi@polman-bandung.ac.id; Ssasongko619@gmail.com; m_ariyanti@yahoo.com

Date: Monday, September 1, 2014 at 09:23 AM GMT+7

dear all participants

best wishes to us all, we as a conference committee would like to inform that:

1. for book a hotel room can contact the following phone numbers:
081370249909 and 08126566573
2. list of tour to Lake Toba later than the 15th of september 2014

thank you very much
committee

Schedulue ICMR 2014

From: Prof Nurhayati (nurhayati@uisu.ac.id)

To: Munajat.ub@gmail.com; ansor_riau@yahoo.co.id; Nilawatiandi@gmail.com; rma_fispro@yahoo.com; samsuri@uny.ac.id; dewisuhardianto@gmail.com; mariana_wahyudi@staff.ubaya.ac.id; Halim.daud87@gmail.com; lusi_utamaindo115@yahoo.co.id; nursulistyobudiambarini@gmail.com; ramli@unhas.ac.id; hamdani_umar@yahoo.com; azuarrizal@gmail.com; endangsihtri@yahoo.com; Hakim_hr@yahoo.com; irharyanimtp@yahoo.co.id; atik_wiryosentono@yahoo.co.id; hari911092@yahoo.co.id; ytunggabhimadi@polman-bandung.ac.id; Ssasongko619@gmail.com; m_ariyanti@yahoo.com; yenni_asbur@yahoo.com

Date: Tuesday, September 9, 2014 at 11:08 AM GMT+7



SCHEDULE ICMR 2014 - surya.pdf
205.1kB



DATE	TIME	ACTIVITY
10/16/2014	08.00 ^{am} – 08.30 ^{am}	Registration
	08.30 ^{am} – 09.30 ^{am}	Opening Ceremony
	09.30 ^{am} - 10.00 ^{am}	Coffee Break
	10.00 ^{am} -12.30 ^{pm}	Keynote Speaker + Special Presenter
	12.30 ^{pm} – 01.30 ^{pm}	Lunch
	01.30 ^{pm} – 04.00 ^{pm}	Parallel Session
	04.00 ^{pm} – 04.30 ^{pm}	Coffee Break
	04.30 ^{pm} – 06.00 ^{pm}	Parallel Session
	10/17/2014	08.00 ^{am} – 10.00 ^{am}
10.00 ^{am} – 10.30 ^{am}		Coffee Break
10.30 ^{am} – 12.00 ^{am}		Parallel Session
12.00 ^{am} – 02.00 ^{pm}		Lunch
02.00 ^{pm} ----- 06.00 ^{pm}		Lake Toba Tour
07.00 ^{pm} - 11.00 ^{pm}		Meet and Greet and Research Cooperation Discussion at Hotel Danau Toba Cottage Entertainment : Ethnic Batak Dance (Tor-Tor)
10/18/2014	07.00 ^{am} – 09.00 ^{am}	Breakfast and Hotel Check-out
	09.00 ^{am} – 12.00 ^{pm}	Visit to Samosir Island
	12.00 ^{pm} – 02.00 ^{pm}	Lunch at Parapat
	02.00 ^{pm} – 06.00 ^{pm}	Heading back to Medan

Schedule ICMR 2014

From: Prof Nurhayati (nurhayati@uisu.ac.id)

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Date: Tuesday, September 9, 2014 at 01:25 PM GMT+7

Dear all participant

Lake Toba tour registration is still open until the 2nd of October 2014, 750,000 per person tour cost. Tour fee includes transportation, hotel, meals, and the cost of crossing to Tomok.

Best Wishes

Secretary



SCHEDULE ICMR 2014 - surya.pdf
205.1kB



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	02.00 ^{pm} – 06.00 ^{pm}	Heading back to Medan

Dear all participants of an international seminar

From: Prof Nurhayati (nurhayati@uisu.ac.id)

To: syahwin63@yahoo.com; melvasilitonga2013@gmail.com; ariyanti_1977@yahoo.com; Munajat.ub@gmail.com; ansor_riau@yahoo.co.id; Susi_deliani@yahoo.com; mfadzil@usm.my; widad@usm.my; zulzaki@usm.my; Nilawatiandi@gmail.com; rma_fispro@yahoo.com; trestuati@gmail.com; susantonanda@gmail.com; samsuri@uny.ac.id; dewisuhardianto@gmail.com; afnaria@uisu.ac.id; mariana_wahyudi@staff.ubaya.ac.id; sukeri@uum.edu.my; norazlanhadi@gmail.com; widyastutireni@yahoo.co.id; mmahdi.sadeghi@gmail.com; hotden_ngl@yahoo.com; asaifude@um.edu.my; Halim.daud87@gmail.com; lusi_utamaindo115@yahoo.co.id; evawany@gmail.com; jamaludinmedan@gmail.com; nursulistyobudiambarini@gmail.com; tiurnalis_siregar@ymail.com; julesopaler@yahoo.com; dwifitraj@gmail.com; hasdianaa@gmail.com; andrianisartikaayu@gmail.com; tazlie@gmail.com; ramli@unhas.ac.id; hamdani_umar@yahoo.com; dr.hasnain.dh@hotmail.com; muslin_nasatorn@hotmail.com; saiful_siantar@yahoo.com; gerry_fkmusu@yahoo.com; mohd.fadzilshuhaimi@qiup.edu.my; liesna.andriany63@gmail.com; irfanrana90@hotmail.com; azuarrazal@gmail.com; nawwal@umk.edu.my; sitihaslina@usm.my; /abdullah@usm.my; Membunga@usm.my; nmnor@usm.my; omzaini@usm.my; sabar@usm.my; sojjah@usm.my; noveritasitumorang@yahoo.com; husni_husin2002@yahoo.com; endangsihtri@yahoo.com; Hakim_hr@yahoo.com; ericwinkel@ymail.com; mhd.asaad@uisu.ac.id; trimartial@uisu.ac.id; j62osesalvador62@gmail.com; arfiani.barus@yahoo.co.id; dshlapen@iusb.edu; irharyanimtp@yahoo.co.id; norziani@usm.my; sitihajar15789@gmail.com; suswatifebri@gmail.com; tariganernita@yahoo.com; atik_wiryosentono@yahoo.co.id; dadan.usm@gmail.com; kimberlyfebrina@yahoo.co.id; zamri_9591@yahoo.com; syarifamayly@yahoo.com; svlarno@yahoo.co.id; arno35437@yahoo.com; mufriah@yahoo.co.id; denovita_02@yahoo.co.id; rehiabarus@yahoo.com; maulanasherlly@gmail.com; agustina_leni@yahoo.com; aisyahalmisky@yahoo.com; irhamna_mega@yahoo.com; yumirasmr86@gmail.com; roswita_sitompul@yahoo.com; efendi_uisu@yahoo.com; yance_uma@yahoo.com; mzuhaina@gmail.com; nurazreemahmud@gmail.com; razali_07@yahoo.co.id; atikmarno@yahoo.co.id; rahmirambe@yahoo.co.id; syamsafitri@yahoo.co.id; midahagus@gmail.com; suditama@yahoo.com; gautaadadhich3392@gmail.com; hari911092@yahoo.co.id; ytunggabhimadi@polman-bandung.ac.id; Ssasongko619@gmail.com; tenrifitriyah68@yahoo.co.id; baharhar67@yahoo.co.id; anistasnim@yahoo.com; sumihutapea@gmail.com; radiahahmad88@yahoo.com; m_ariyanti@yahoo.com; hapsohdin@yahoo.co.id; hendysaleh29@pancabudi.ac.id; ellilubis@gmail.com; fbalatif@gmail.com; karolina_sitepu@yahoo.co.id; rz_linda@yahoo.com; manaludarwis@gmail.com; manaludarwis@gmail.com; vera.indr4@gmail.com; amalia@uisu.ac.id; susi_eka_lestari@uisu.ac.id; yayuk_dadan@yahoo.com; srisetyaningrumpriana@gmail.com; dini210783@gmail.com; srimalem_indirawati@yahoo.co.id; bangsas@yahoo.com; dompakn@yahoo.com; samah_eri@yahoo.com; yenni_asbur@yahoo.com; imamtkj@gmail.com; tamaulina_sembiring@yahoo.co.id; truthtrg@yahoo.com; johnrudy2014@gmail.com; p.sukumar@iitg.ernet.in; nuhung.usm@gmail.com; sinthadw@yahoo.com; derisisnanda@gmail.com; noraidahkeling@gmail.com; m.zarlis@yahoo.com; sri.utami75@ymail.com; dewi.yh@gmail.com; buchari65@yahoo.com; faridahjaafar@usm.my

Date: Monday, September 15, 2014 at 03:18 PM GMT+7

Dear all participants of an international seminar

We as the committee tells us that the full paper submission limit extended until the 20th of September 2014, we announce to include scanned proof of payment, student card, and if interested in joining the tour to Lake Toba just sign up to the committee, and at seminars take place throughout participants are required to bring a student card if still enrolled and bring proof of payment of the seminar.

Best Wishes

Committe

Schedule of events

From: Prof Nurhayati (nurhayati@uisu.ac.id)

To: syahwin63@yahoo.com; melvasilitonga2013@gmail.com; ariyanti_1977@yahoo.com; Munajat.ub@gmail.com; ansor_riau@yahoo.co.id; faridahjaafar@usm.my; Susi_deliani@yahoo.com; mfadzil@usm.my; widad@usm.my; zulzaki@usm.my; Nilawatiandi@gmail.com; rma_fispro@yahoo.com; trestuati@gmail.com; susantonanda@gmail.com; samsuri@uny.ac.id; dewisuhardianto@gmail.com; afnaria@uisu.ac.id; mariana_wahyudi@staff.ubaya.ac.id; sukeri@uum.edu.my; norazlanhadi@gmail.com; widyastutireni@yahoo.co.id; mmahdi.sadeghi@gmail.com; hotden_ngl@yahoo.com; asaifude@um.edu.my; Halim.daud87@gmail.com; lusi_utamaindo115@yahoo.co.id; evawany@gmail.com; jamaludinmedan@gmail.com; nursulistyobudiambarini@gmail.com; tiurnalis_siregar@gmail.com; julesopaler@yahoo.com; dwifitraj@gmail.com; hasdianaa@gmail.com; andrianisartikaayu@gmail.com; tazlie@gmail.com; ramli@unhas.ac.id; hamdani_umar@yahoo.com; dr.hasnain.dh@hotmail.com; muslin_nasatorn@hotmail.com; saiful_siantar@yahoo.com; gerry_fkmusu@yahoo.com; mohd.fadzilshuhaimi@qiup.edu.my; liesna.andriany63@gmail.com; irfanrana90@hotmail.com; azuarrizal@gmail.com; nawwal@umk.edu.my; sitihaslina@usm.my; /abdullah@usm.my; Membunga@usm.my; nmnor@usm.my; omzaini@usm.my; sabar@usm.my; soijah@usm.my; noveritasitumorang@yahoo.com; husni_husin2002@yahoo.com; endangsihtri@yahoo.com; Hakim_hr@yahoo.com; ericwinkel@gmail.com; mhd.asaad@uisu.ac.id; trimartial@uisu.ac.id; j62osesalvador62@gmail.com; arfiani.barus@yahoo.co.id; dshlapen@iusb.edu; irharyanimtp@yahoo.co.id; norziani@usm.my; sitihajar15789@gmail.com; suswatifebri@gmail.com; tariganernita@yahoo.com; atik_wiryosentono@yahoo.co.id; dadan.usm@gmail.com; kimberlyfebrina@yahoo.co.id; zamri_9591@yahoo.com; syarifamayly@yahoo.com; svlarno@yahoo.co.id; arno35437@yahoo.com; mufriah@yahoo.co.id; denovita_02@yahoo.co.id; rehiabarus@yahoo.com; maulanasherlly@gmail.com; agustina_leni@yahoo.com; aisyahalmisky@yahoo.com; irhamna_mega@yahoo.com; yumirasmr86@gmail.com; roswita_sitompul@yahoo.com; efendi_uisu@yahoo.com; yance_uma@yahoo.com; mzuhaina@gmail.com; nurazreemahmud@gmail.com; razali_07@yahoo.co.id; atikmarno@yahoo.co.id; rahmirambe@yahoo.co.id; syamsafitri@yahoo.co.id; midahagus@gmail.com; suditama@yahoo.com; gautaadadhich3392@gmail.com; hari911092@yahoo.co.id; ytunggabhimadi@polman-bandung.ac.id; Ssasongko619@gmail.com; tenrifitriyah68@yahoo.co.id; baharhar67@yahoo.co.id; anistasnim@yahoo.com; sumihutapea@gmail.com; radiahahmad88@yahoo.com; m_ariyanti@yahoo.com; hapsohdin@yahoo.co.id; hendysaleh29@pancabudi.ac.id; ellilubis@gmail.com; fbalatif@gmail.com; karolina_sitepu@yahoo.co.id; manaludarwis@gmail.com; poltakhombing@yahoo.com; manalaudarwis@gmail.com; vera.indr4@gmail.com; amalia@uisu.ac.id; susi_eka_lestari@uisu.ac.id; yayuk_dadan@yahoo.com; srisetyaningrumpriana@gmail.com; dini210783@gmail.com; srimalem_indirawati@yahoo.co.id; bangsas@yahoo.com; dompakn@yahoo.com; samah_eri@yahoo.com; yenni_asbur@yahoo.com; imamtkj@gmail.com; m.zarlis@yahoo.co; tamaulina_sembiring@yahoo.co.id; truthtrg@yahoo.com; johnrudy2014@gmail.com; p.sukumar@iitg.ernet.in; nuhung.usm@gmail.com; sinthadw@yahoo.com; derisisnanda@gmail.com; noraidahkeling@gmail.com; m.zarlis@yahoo.com; sri.utami75@gmail.com; dewi.yh@gmail.com; buchari65@yahoo.com

Date: Monday, September 15, 2014 at 03:38 PM GMT+7

Here we attach a schedule of events for the international conference 16 -18 september 2014



SCHEDULE ICMR 2014 - revisi-1.pdf
445.8kB

DATE	TIME	ACTIVITY
10/16/2014	07.30 ^{am} – 08.30 ^{am}	Registration
	08.30 ^{am} – 09.30 ^{am}	Opening Ceremony : - Opening by MC - Prayer - Welcome Dance - Foreword by Organizing Committee - Welcome Speech by Rector - Speech by KOPERTIS and Officially Opening The Conference
	09.30 ^{am} – 11.10 ^{am}	Panel Session I : Keynote Speaker (4 person)
	11.10 ^{am} – 11.25 ^{am}	Coffee Break
	11.25 ^{am} – 12.15 ^{pm}	Panel Session II : Special Presenter (2 person)
	12.15 ^{pm} – 01.30 ^{pm}	Lunch
	01.30 ^{pm} – 04.00 ^{pm}	Parallel Session I
	04.00 ^{pm} – 04.30 ^{pm}	Coffee Break + Prayer
	04.30 ^{pm} – 06.00 ^{pm}	Parallel Session II
10/17/2014	07.00 ^{pm} – 09.00 ^{pm}	Dinner + Cultural Program (Dance and Singing)
	08.00 ^{am} – 10.00 ^{am}	Parallel Session III
	10.00 ^{am} – 10.30 ^{am}	Coffee Break
	10.30 ^{am} – 12.00 ^{am}	Parallel Session IV
	12.00 ^{am} – 12.30 ^{pm}	Closing Ceremony : - Closing Speech by Rector of UISU and Submission of ICMR Token to USM - Speech by USM Representative
	12.30 ^{am} – 02.00 ^{pm}	Lunch
	02.00 ^{pm} - 06.00 ^{pm}	Lake Toba Tour
10/18/2014	07.00 ^{pm} - 11.00 ^{pm}	Meet and Greet and Research Cooperation Discussion at Hotel Danau Toba Cottage Entertainment : Ethnic Batak Dance (Tor-Tor)
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Schedule ICMR 2014

From: Prof Nurhayati (nurhayati@uisu.ac.id)

To: m_ariyanti@yahoo.com; dafni_mawar@rocketmail.com; srisetyaningrumpriana@gmail.com; dini210783@gmail.com; atikmarno@yahoo.co.id; yenni_asbur@yahoo.com; muin_sibuea@yahoo.com; agnita_yolanda@yahoo.co.id; amalia@uisu.ac.id; tenrifitriyah68@yahoo.co.id; andrianisartikaayu@gmail.com; baharhar67@yahoo.co.id; bangsas@yahoo.com; hendysaleh29@pancabudi.ac.id; binamelvialia@gmail.com; dadan.usm@gmail.com; manalaudarwis@gmail.com; manaludarwis@gmail.com; poltakhombing@yahoo.com; delimapanjaitan09@yahoo.co.id; derisisnanda@gmail.com; denovita_02@yahoo.co.id; dewisuhardianto@gmail.com; mufriah@yahoo.co.id; ericwinkel@gmail.com; p.sukumar@iitg.ernet.in; widyastutireni@yahoo.co.id; nuhung.usm@gmail.com; sinthadw@yahoo.com; darmansitepu2@gmail.com; rehiabarus@yahoo.com; ellilubis@gmail.com; rma_fispro@yahoo.com; ernitha2005@yahoo.co.id; evawany@gmail.com; lasiaf34@yahoo.com; gautaadadhich3392@gmail.com; gerry_fkmusu@yahoo.com; Hakim_hr@yahoo.com; hapsohdin@yahoo.co.id; irharyanimtp@yahoo.co.id; hasdianaa@gmail.com; hotden_ngl@yahoo.com; ibnukhdn@yahoo.com; imamtkj@gmail.com; m.zarlis@yahoo.com; indrawaty.sitepu@gmail.com; tariganernita@yahoo.com; iswandi.idris@gmail.com; jamaludinmedan@gmail.com; julesopaler@yahoo.com; kimberlyfebrina@yahoo.co.id; lamriasidauruk@yahoo.com; agustina_leni@yahoo.com; fp_lisa@yahoo.co.id; lusi_utamaindo115@yahoo.co.id; ramli@unhas.ac.id; tlana2109@yahoo.com; melvasilitonga2013@gmail.com; sukeri@uum.edu.my; mohd.fadzilshuhaimi@qiup.edu.my; Munajat.ub@gmail.com; noraidahkeling@gmail.com; nurfatihah1411@yahoo.com; nurzainahginting@gmail.com; yayuk_dadan@yahoo.com; rahmirambe@yahoo.co.id; hasudungan_r@yahoo.com; roswita_sitompul@yahoo.com; truthtrg@yahoo.com; sabar@usm.my; sitihaslina@usm.my; /abdullah@usm.my; baidzuri88@gmail.com; suswatifabri@gmail.com; sutanti_amrizal@yahoo.com; arno35437@yahoo.com; syamsafitri@yahoo.co.id; tamaulina_sembiring@yahoo.co.id; tazlie@gmail.com; endangsihtri@yahoo.com; arfiani.barus@yahoo.co.id; yance_uma@yahoo.com; yohanes.suhardin@yahoo.co.id; yumirasmr86@gmail.com; mzuhaina@gmail.com; zuliyanti@yahoo.com; miminiari@gmail.com

Date: Friday, September 19, 2014 at 04:20 PM GMT+7



SCHEDULE ICMR 2014 - revisi-1(1).pdf
445.8kB

DATE	TIME	ACTIVITY
10/16/2014	07.30 ^{am} – 08.30 ^{am}	Registration
	08.30 ^{am} – 09.30 ^{am}	Opening Ceremony : - Opening by MC - Prayer - Welcome Dance - Foreword by Organizing Committee - Welcome Speech by Rector - Speech by KOPERTIS and Officially Opening The Conference
	09.30 ^{am} – 11.10 ^{am}	Panel Session I : Keynote Speaker (4 person)
	11.10 ^{am} – 11.25 ^{am}	Coffee Break
	11.25 ^{am} – 12.15 ^{pm}	Panel Session II : Special Presenter (2 person)
	12.15 ^{pm} – 01.30 ^{pm}	Lunch
	01.30 ^{pm} – 04.00 ^{pm}	Parallel Session I
	04.00 ^{pm} – 04.30 ^{pm}	Coffee Break + Prayer
	04.30 ^{pm} – 06.00 ^{pm}	Parallel Session II
10/17/2014	07.00 ^{pm} – 09.00 ^{pm}	Dinner + Cultural Program (Dance and Singing)
	08.00 ^{am} – 10.00 ^{am}	Parallel Session III
	10.00 ^{am} – 10.30 ^{am}	Coffee Break
	10.30 ^{am} – 12.00 ^{am}	Parallel Session IV
	12.00 ^{am} – 12.30 ^{pm}	Closing Ceremony : - Closing Speech by Rector of UISU and Submission of ICMR Token to USM - Speech by USM Representative
	12.30 ^{am} – 02.00 ^{pm}	Lunch
	02.00 ^{pm} - 06.00 ^{pm}	Lake Toba Tour
10/18/2014	07.00 ^{pm} - 11.00 ^{pm}	Meet and Greet and Research Cooperation Discussion at Hotel Danau Toba Cottage Entertainment : Ethnic Batak Dance (Tor-Tor)
	07.00 ^{am} – 09.00 ^{am}	Breakfast and Hotel Check-out
	09.00 ^{am} – 12.00 ^{pm}	Visit to Samosir Island
	12.00 ^{pm} – 02.00 ^{pm}	Lunch at Parapat Parapat – Si Piso-piso (Waterfall) - Brastagi
	04.00 ^{pm} – 06.00 ^{pm}	Heading back to Medan from Brastagi



Letter of Information

From: Prof Nurhayati (nurhayati@uisu.ac.id)

To: samsuri@uny.ac.id; m_ariyanti@yahoo.com; hari911092@yahoo.co.id; ytunggabhimadi@polman-bandung.ac.id; Ssasonoko619@gmail.com; Nilawatiandi@gmail.com; dafni_mawar@rocketmail.com; faridahjaafar@usm.my; srisetyaningrumpriana@gmail.com; dini210783@gmail.com; atikmarno@yahoo.co.id; yenni_asbur@yahoo.com; muin_sibuea@yahoo.com; Halim.daud87@gmail.com; afnaria@uisu.ac.id; agnita_yolanda@yahoo.co.id; midahagus@gmail.com; amalia@uisu.ac.id; asaifude@um.edu.my; tenrifitriyah68@yahoo.co.id; andrianisartikaayu@gmail.com; anistasnim@yahoo.com; suswatifebri@gmail.com; baharhar67@yahoo.co.id; bangsas@yahoo.com; hendysaleh29@pancabudi.ac.id; binamelvia@gmail.com; dadan.usm@gmail.com; manalaudarwis@gmail.com; manaludarwis@gmail.com; poltakhombing@yahoo.com; derisisnanda@gmail.com; denovita_02@yahoo.co.id; dewisuhardianto@gmail.com; dewi.yh@gmail.com; mufriah@yahoo.co.id; dshlapen@iusb.edu; dompakn@yahoo.com; ericwinkel@ymail.com; p.sukumar@iitg.ernet.in; widyastutireni@yahoo.co.id; nuhung.usm@gmail.com; sinthadw@yahoo.com; Susi_deliani@yahoo.com; tiurnalis_siregar@ymail.com; johnrudy2014@gmail.com; zulzaki@usm.my; darmansitepu2@gmail.com; rehiabarus@yahoo.com; dwifitraj@gmail.com; efendi_uisu@yahoo.com; ellilubis@gmail.com; samah_eri@yahoo.com; rma_fispro@yahoo.com; ernitha2005@yahoo.co.id; evawany@gmail.com; lasiaf34@yahoo.com; gautaadadhich3392@gmail.com; gerry_fkmusu@yahoo.com; Hakim_hr@yahoo.com; hapsohdin@yahoo.co.id; irharyanimtp@yahoo.co.id; hasdianaa@gmail.com; dr.hasnain.dh@hotmail.com; hotden_ngl@yahoo.com; husni_husin2002@yahoo.com; ibnukhdn@yahoo.com; imamtkj@gmail.com; m.zarlis@yahoo.com; indrawaty.sitepu@gmail.com; tariganernita@yahoo.com; irfanrana90@hotmail.com; iswandi.idris@gmail.com; jamaludinmedan@gmail.com; j62osesalvador62@gmail.com; julesopaler@yahoo.com; karolina_sitepu@yahoo.co.id; rz_linda@yahoo.com; kimberlyfebrina@yahoo.co.id; lamriasidauruk@yahoo.com; agustina_leni@yahoo.com; liesna.andriany63@gmail.com; ariyanti_1977@yahoo.com; fp_lisa@yahoo.co.id; lusi_utamaindo115@yahoo.co.id; fbalatif@gmail.com; ramli@unhas.ac.id; mariana_wahyudi@staff.ubaya.ac.id; trestuati@gmail.com; tlana2109@yahoo.com; melvasilitonga2013@gmail.com; mhd.asaad@uisu.ac.id; trimartial@uisu.ac.id; sukeri@uum.edu.my; mmahdi.sadeghi@gmail.com; mohd.fadzilshuhaimi@qiup.edu.my; ansor_riau@yahoo.co.id; buchari65@yahoo.com; Munajat.ub@gmail.com; muslin_nasatarn@hotmail.com; mfadzil@usm.my; nmnor@usm.my; omzaini@usm.my; nawwal@umk.edu.my; hamdani_umar@yahoo.com; norziani@usm.my; noraidahkeling@gmail.com; norazlanhadi@gmail.com; noveritasitumorang@yahoo.com; nurfatiha1411@yahoo.com; nursulistyobudiambarini@gmail.com; nurazreemahmud@gmail.com; nurzainahginting@gmail.com; delimapanjaitan09@yahoo.co.id; yayuk_dadan@yahoo.com; radiahahmad88@yahoo.com; rahmirambe@yahoo.co.id; razali_07@yahoo.co.id; aisyalhalmisky@yahoo.com; hasudungan_r@yahoo.com; roswita_sitompul@yahoo.com; rosyadi.aziz@gmail.com; truthtrg@yahoo.com; sabar@usm.my; saiful_siantar@yahoo.com; sarif2000@yahoo.com; sarimsptmp@yahoo.com; maulanasherly@gmail.com; sitihajar15789@gmail.com; sitihaslina@usm.my; /abdullah@usm.my; Membunga@usm.my; baidzuri88@gmail.com; soijah@usm.my; srimalem_indirawati@yahoo.co.id; irhamna_mega@yahoo.com; sri.utami75@ymail.com; suditama@yahoo.com; atik_wiryosentono@yahoo.co.id; svlarno@yahoo.co.id; sumihutapea@gmail.com; susantonanda@gmail.com; sutanti_amrizal@yahoo.com; arno35437@yahoo.com; syahwin63@yahoo.com; syamsafitri@yahoo.co.id; syarifamayly@yahoo.com; azuarrizal@gmail.com; tamaulina_sembiring@yahoo.co.id; tazlie@gmail.com; endangsihtri@yahoo.com; vera.indr4@gmail.com; arfiani.barus@yahoo.co.id; widad@usm.my; yance_uma@yahoo.com; yohanes.suhardin@yahoo.co.id; yumirasmr86@gmail.com; zamri_9591@yahoo.com; mzuhaina@gmail.com; zuliyanti@yahoo.com; miminiari@gmail.com; lestarie20@yahoo.com

Date: Saturday, September 20, 2014 at 11:52 AM GMT+7

Dear All Participant

We inform to immediately confirm the presence and seminar registration fee, last date of 24 September 2014. Our great expectation that the participants can respond.

Best wishes

Committe

Inform Letter to All Participant

From: Prof Nurhayati (nurhayati@uisu.ac.id)

To: misdawatikasmi@yahoo.com; samsuri@uny.ac.id; m_ariyanti@yahoo.com; hari911092@yahoo.co.id; ytunggabhimadi@polman-bandung.ac.id; Ssasongko619@gmail.com; Nilawatiandi@gmail.com; dafni_mawar@rocketmail.com; faridahjaafar@usm.my; srisetyaningrumpriana@gmail.com; dini210783@gmail.com; sugianto@unsyiah.ac.id; atikmarno@yahoo.co.id; yenni_asbur@yahoo.com; aharisnst@gmail.com; muin_sibuea@yahoo.com; Halim.daud87@gmail.com; afnaria@uisu.ac.id; agnita_yolanda@yahoo.co.id; midahagus@gmail.com; amalia@uisu.ac.id; zuliyanti@yahoo.com; asaifude@um.edu.my; tenrifitriyah68@yahoo.co.id; andrianisartikaayu@gmail.com; khayla2000@yahoo.com; anistasnim@yahoo.com; suswatifebri@gmail.com; nizar_312@yahoo.com; baharhar67@yahoo.co.id; bangsas@yahoo.com; hendysaleh29@pancabudi.ac.id; binamelvia@gmail.com; cutnelly@ymail.com; dadan.usm@gmail.com; dahlenausm@gmail.com; manalaudarwis@gmail.com; manaludarwis@gmail.com; poltakhombing@yahoo.com; derisisnanda@gmail.com; denovita_02@yahoo.co.id; dewisuhardianto@gmail.com; dewi.yh@gmail.com; diana_ag@yahoo.com; dinaarwina@gmail.com; mufriah@yahoo.co.id; dshlapen@iusb.edu; dompakn@yahoo.com; ericwinkel@ymail.com; p.sukumar@iitg.ernet.in; widyastutireni@yahoo.co.id; nuhung.usm@gmail.com; sinthadw@yahoo.com; Susi_deliani@yahoo.com; tiurnalis_siregar@ymail.com; johnrudy2014@gmail.com; zulzaki@usm.my; darmansitepu2@gmail.com; rehiabarus@yahoo.com; dwifitraj@gmail.com; efendi_uisu@yahoo.com; ellilubis@gmail.com; samah_eri@yahoo.com; rma_fispro@yahoo.com; ernitha2005@yahoo.co.id; evawany@gmail.com; lasiaf34@yahoo.com; gautaadadhich3392@gmail.com; gerry_fkmusu@yahoo.com; Hakim_hr@yahoo.com; hamidah.azhar@yahoo.co.id; hapsohdin@yahoo.co.id; irharyanimtp@yahoo.co.id; hasdianaa@gmail.com; dr.hasnain.dh@hotmail.com; henny_wina@yahoo.co.id; hotden_ngl@yahoo.com; husni_husin2002@yahoo.com; ibnukhdn@yahoo.com; imamtkj@gmail.com; m.zarlis@yahoo.com; indrawaty.sitepu@gmail.com; tariganernita@yahoo.com; irfanrana90@hotmail.com; iswandi.idris@gmail.com; jamaludinmedan@gmail.com; j62osesalvador62@gmail.com; julesopaler@yahoo.com; karolina_sitepu@yahoo.co.id; rz_linda@yahoo.com; kimberlyfebrina@yahoo.co.id; lamriasidauruk@yahoo.com; syafir.hs@gmail.com; agustina_leni@yahoo.com; liesna.andriany63@gmail.com; ariyanti_1977@yahoo.com; fp_lisa@yahoo.co.id; lusi_utamaindo115@yahoo.co.id; idris_juki@yahoo.com; ramli@unhas.ac.id; mariana_wahyudi@staff.ubaya.ac.id; Mariani.sembiring29@yahoo.com; trestuati@gmail.com; tlana2109@yahoo.com; s.sugianto@gmail.co; tessellar@gmail.com; mohd_peter@hotmail.com; melvasilitonga2013@gmail.com; mhd.asaad@uisu.ac.id; trimartial@uisu.ac.id; sukeri@uum.edu.my; mmahdi.sadeghi@gmail.com; mohd.fadzilshuhaimi@qip.edu.my; ansor_riau@yahoo.co.id; buchari65@yahoo.com; Munajat.ub@gmail.com; muslin_nasatorn@hotmail.com; mfadzil@usm.my; nmnor@usm.my; omzaini@usm.my; miminiari@gmail.com; nasrun.nst@gmail.com; nawwal@umk.edu.my; hamdani_umar@yahoo.com; norziani@usm.my; noraidahkeling@gmail.com; norazlanhadi@gmail.com; noveritasitumorang@yahoo.com; nurfatihah1411@yahoo.com; nursulistyobudiambarini@gmail.com; nurazreemahmud@gmail.com; nurzainahginting@gmail.com; delimapanjaitan09@yahoo.co.id; yayuk_dadan@yahoo.com; radiahahmad88@yahoo.com; rahmirambe@yahoo.co.id; razali_07@yahoo.co.id; aisyahalmisky@yahoo.com; hasudungan_r@yahoo.com; roswita_sitompul@yahoo.com; rosyadi.aziz@gmail.com; truthtrg@yahoo.com; sabar@usm.my; saiful_siantar@yahoo.com; sarif2000@yahoo.com; sarimsptmp@yahoo.com; boy_mdn@yahoo.com; maulanasherly@gmail.com; sitihajar15789@gmail.com; sitihaslina@usm.my; /abdullah@usm.my; Membunga@usm.my; baidzuri88@gmail.com; sofyana71@yahoo.co.id; soijah@usm.my; srimalem_indirawati@yahoo.co.id; irhamna_mega@yahoo.com; sri.utami75@ymail.com; suditama@yahoo.com; atik_wiryosentono@yahoo.co.id; svlarno@yahoo.co.id; sumihutapea@gmail.com; sabadi@ymail.com; dr.akbar9@gmail.com; susantonanda@gmail.com; sutanti_amrizal@yahoo.com; arno35437@yahoo.com; syahwin63@yahoo.com; syamsafitri@yahoo.co.id; syarifamayly@yahoo.com; tatividianasari@gmail.com; azuarrizal@gmail.com; taulina_sembiring@yahoo.co.id; tazlie@gmail.com; purbationer@yahoo.co.id; endangsihtri@yahoo.com; umi_fathur@yahoo.com; vera.indr4@gmail.com; arfiani.barus@yahoo.co.id; widad@usm.my; yance_uma@yahoo.com; yohanes.suhardin@yahoo.co.id; yistiadi@yahoo.com; yumirasmr86@gmail.com; mzuhaina@gmail.com; zamri_9591@yahoo.com; griet102309@yahoo.com.au; ismuda0507@yahoo.com; amongunpad@gmail.com; melvaunj@gmail.com

Date: Friday, October 3, 2014 at 11:13 AM GMT+7

Dear All Participant

We would like to inform all participants to immediately submit proof of payment and confirm the presence and the seminars are also scheduled arrival at the airport so that the committee can pick up.

For registration of Lake Toba tour can sign up to the 5th of October 2014.

And for the poster participants, Benner size width 60cm x height 160cm, finishing folding the top right corner of the chicken under wear eye using the logo ICMR 2014, we enclose the following logo.



Logo ICMR 2014.jpg
252.5kB



CMR2014

INTERNATIONAL CONFERENCE ON
MULTIDISCIPLINARY RESEARCH

Re-confirmation International Journal and Proceeding

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Date: Friday, November 21, 2014 at 11:00 AM GMT+7



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Islamic University of North Sumatera, 16 - 18 October 2014
Jln. Karya Bakti No. 34 Medan Johor, North Sumatera, Indonesia
Website : lib.uisu.ac.id / icmr2014.uisu.ac.id

The 3rd International Conference on Multidisciplinary Research 2014

Medan, 21st November 2014

To: Presenters

Related to article publication presented on the International Conference in Multidisciplinary Research (ICMR), 17-18 October 2014, we would like to inform you that there will be two alternatives for your article publication: Proceeding and International Journal. However, there are sum requirements that have to be fulfilled. They are as follows:

1. Re-confirmation by the author of the article to the committee.
2. The content and the writing system of the article should meet the requirement of those of the international journal.
3. The article that is published in international journal will not be published in proceeding.
4. The sum of the disbursements for article that is published in international journal depends on the journal that will published it.

It is our gratitude for your confirmation dealing with the article publication.

Thank you very much
Sincerely Yours,

CMR2014
INTERNATIONAL CONFERENCE ON
MULTIDISCIPLINARY RESEARCH



CMR2014
INTERNATIONAL CONFERENCE ON
MULTIDISCIPLINARY RESEARCH
Islamic University of North Sumatera
16 - 18 October 2014



Prof. Jumino Suhadi, M.A., Ph.D
Chairman



Re: Info proceeding icmr 2014

From: Prof Nurhayati (nurhayati@uisu.ac.id)

To: rma_fispro@yahoo.com

Date: Tuesday, December 16, 2014 at 01:11 PM GMT+7

Yth. Dr. Erma Safitri

Proceeding akan terbit pada akhir desember dan secepatnya akan kami kirimkan setelah selesai.

terima kasih,

Prof. Nurhayati

2014-12-15 21:18 GMT+07:00 Safitri Erma <rma_fispro@yahoo.com>:

Yth. Prof. Nurhayati

Mhn info proceeding icmr 2014.

Trm ksh

Salam hormat

Dr. Erma Safitri

Stem Cells Research Devisiion
dan FKH-Universitas Airlangga
Surabaya

Information for ICMR 2015

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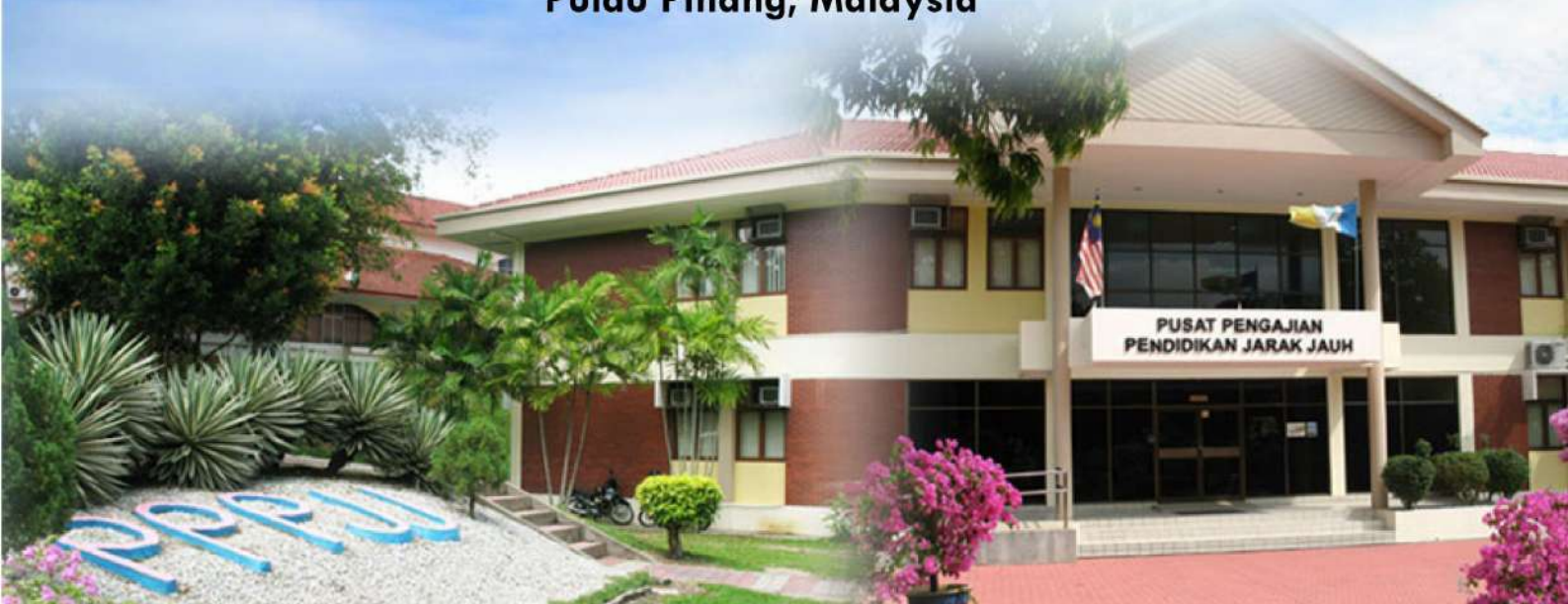


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Marrow Mesenchymal Stem Cell (MMSCs) Transplantation for the Improvement of Reproductive Function in Rat Testis Degeneration

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Abstract. The purpose of this research was to obtain adaptive MMSCs for the therapy of testicular degeneration in rat. Adaptive MMSCs can be achieved by hypoxia precondition during in vitro culture. Hypoxia precondition in this research was conducted by applying 3% O₂ which was then compared with those cultured in normoxic 21% O₂. The specific target of this research was divided into two experiments, Experiment 1 was the isolation and identification of mesenchymal stem cell from rat bone marrow. Identification was confirmed by the expression of CD 105⁺ and CD45⁻ cells. In Experiment 2 cellular MMSCs testiculomyoplasty were performed on male rats that have been preconditioned with testicle degeneration. Next, the success was identified in vivo based on the expression of spermatogonial stem cell (SSCs) and the improvement of testicle tissue. Transplantation results showed that under 3% O₂ concentration SSCs were expressed and testis tissue improvement occurred. Meanwhile at 21% O₂ concentration testis tissue improvement did not occur. The conclusion of this research showed that hypoxia precondition using 3% O₂ concentration very support MMSCs to remain adaptive after being transplanted to patient with spermatogenesis impairment, in addition to the testicle tissue improvement.

Keywords: MMSCs, Testicular Degeneration, Testicle Tissue Improvement

Introduction

Testicular degeneration that lead to permanent damage of male main reproductive organ is normally followed by pathological remodelling (Schlatt *et al.*, 2002). Regeneration is merely possible to occur when normal spermatogonia and Sertoli cells still remaining in seminiferous tubules in a long period of time. Therefore, regeneration capacity to replace the degenerated cells is very limited (Hafez, 2000).

Transplantation of Marrow Mesenchymal Stem Cells (MMSCs) from bone marrow gave very promising solution in regenerating and returning the degenerating testicle tissue (Blanchard *et al.*, 1998). However, the minimum viability of the transplanted MMSCs in degenerated testicle caused a limited efficacies of this therapy (Kenichiro *et al.*, 2005; Tang *et al.*, 2005).

Hypoxia condition was needed during culture in order the stem cells remained adaptive and viable before and after transplantation (Safitri *et al.*, 2014). This condition was adjusted to mimic in vivo condition where the stem cells were produced. In testicle tissue, stem cells for spermatogenesis were in hypoxiacondition, i.e. under 1-6 % O₂ concentration (Wenger and Katschinski, 2005). In this research the concentration of O₂ applied was 3 % which was compared with conventional condition 21 % O₂.

Research Methods

Procedure of RAT MSCs isolation and culture:

Rat was premedicated and general anesthetized. MSCs from bone marrow was harvested by an aspiration at the middle of rat femur bone below the condylus. Aspirate contained rat MSCs from bone marrow was placed in heparinized tubes. Sample in tube was placed in thermos maintained at 4°C during transportation to be processed.

Sample was transferred into 15 ml sterile blue capped tubes and then the tube was rinsed twice with 5 ml sterile PBS and added up to a total volume of 10 ml. The diluted sample

was loaded over a same volume of Ficoll in a separate 15 ml tube. Centrifugation at 1600 rpm was performed for 15 minutes at room temperature. After centrifugation, the cells were collected from Ficoll-PBS interface using sterile pasteur pipette and transferred into a 15 ml tube. The cells were then resuspended in PBS up to a total volume of 15 ml. The tube was inverted gently 5 times to homogenize the suspension.

The suspension was then centrifuged again at 1600 rpm for 10 minutes. Supernatant and floating cells were discarded and cell pellet was resuspended in 6 ml of α MEM media. Mononucleated cells were plated in 10 cm² plates at 2×10^7 and incubated at 37°C in a humidified atmosphere containing 5% CO₂ for 24 hours to let the cells adhere. After 24 hours, media and non-adherent cells were discarded. Adherent cells were rinsed twice using 5 ml of PBS. Ten ml of fresh α MEM media was then added into dish and the dish was returned into the incubator. Culture was observed daily under an inverted microscope. Every 4 days medium was changed, preceded by a rinse using 10 ml PBS then 10 ml of fresh α MEM media were replaced. Culture was continued until approximately 75-80% confluence was attained. After confluence, cells were passaged into several dishes for subculture (Rantam *et al.*, 2009). Passage was conducted 3 times, then cells were divided into two hypoxic precondition treatments of 3% in hypoxic chamber inside a 5% CO₂ incubator while another treatment was the use of 21% oxygen (normoxia).

At the second day after hypoxic precondition treatments cells were analysed for the expression of surface marker CD105 and CD45 by flowcytometry. Flow cytometric analysis was performed using a flowcytometer (FACSCalibur) and CellQuest software. Antibodies used were monoclonal APC anti-mouse CD105 (Biolegend), dan PerCP-Cy5.5 anti-rabbit cross anti-rat CD45 (BD).

Two days after hypoxic preconditioning MMSCs were transplanted into rats that had been induced for testicular degeneration. The following ten days surgery was performed to collect testicle tissue. Testicle tissue improvement was observed through HE stained histopathological preparation.

Results and Discussion

Flowcytometric analysis showed that under 3% O₂ concentration, the level of CD105 and CD44 cells in MMSCs culture were not altered (still undifferentiated). Meanwhile under 21% O₂ concentration, cells have experienced alteration (became differentiated), that was indicated by the decrease of CD105 and CD44 cells (Figure 1 - 3).

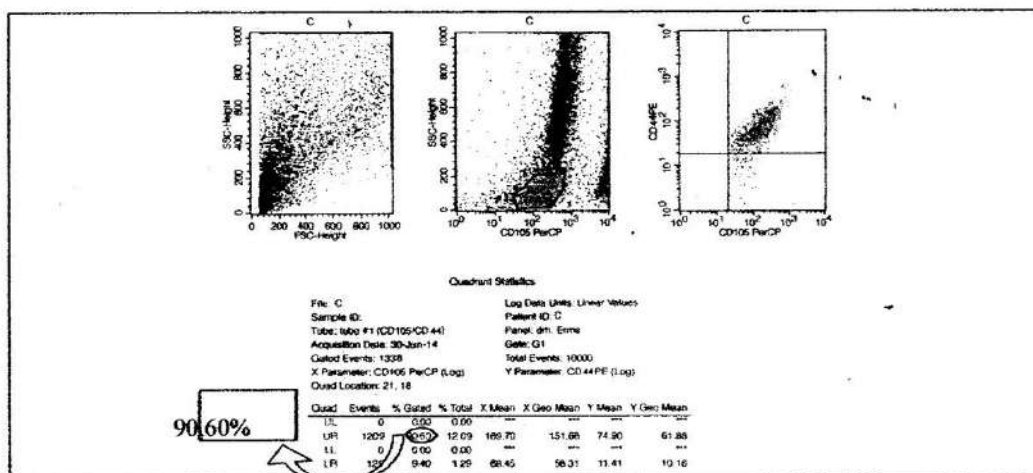


Fig. 1: Flowcytometric analysis of MSCs culture before hypoxic preconditioning (Control) showing positive expression of CD105 and CD44 (90,60%).

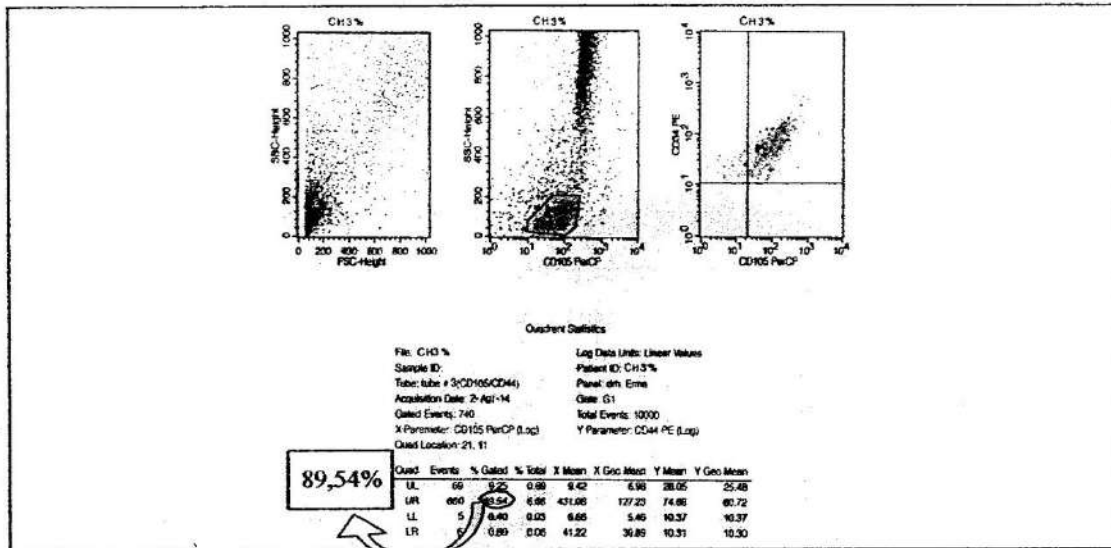


Fig. 2: Flowcytometric analysis of MSCs culture under hypoxic precondition (1% O₂ concentration) showing positive expression of CD105 and CD44 (89,54%).

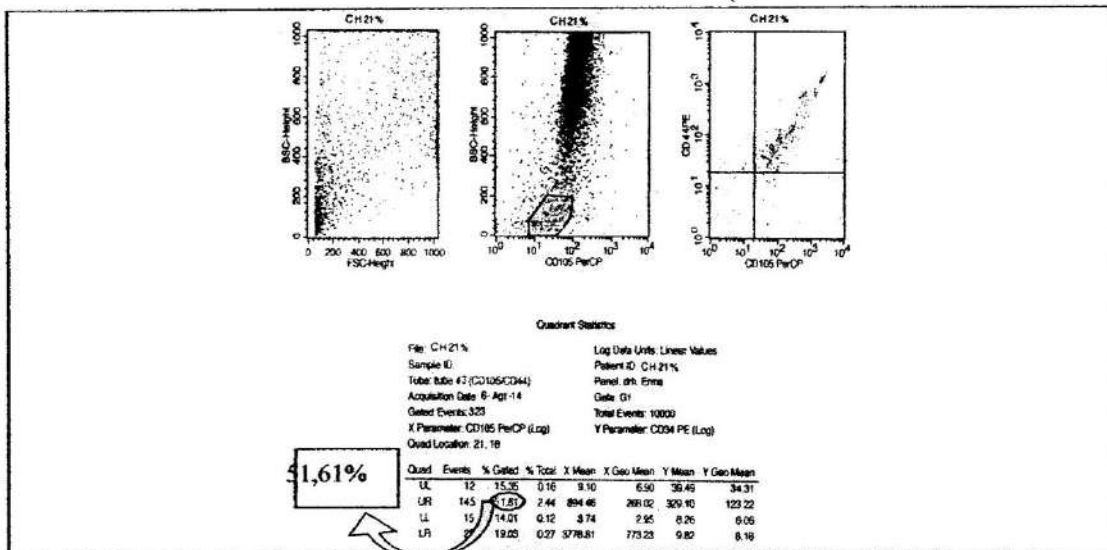


Fig. 3: Flowcytometric analysis of MSCs culture under 21% O₂ concentration (normoxia) showing positive expression of CD105 and CD44 (51,61%).

Histopathological observation showed that testicular tissue transplanted with MMSCs cultured under 3 % O₂ tension was regenerated, meanwhile testicular tissue transplanted with MMSCs cultured under 21 % O₂ tension was not regenerated.

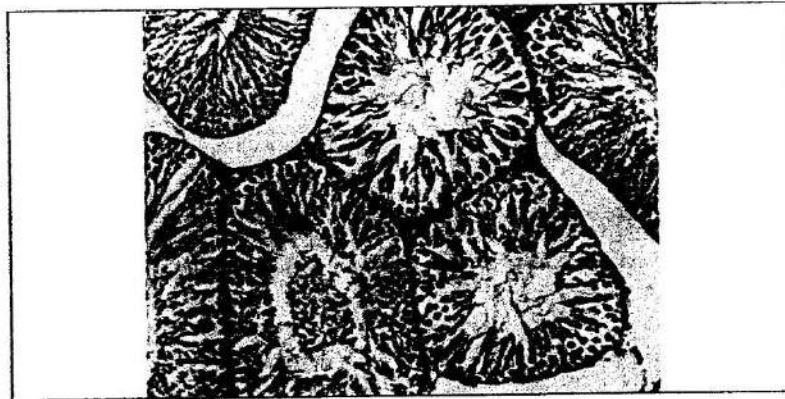


Fig. 4: Testicular tissue transplanted with MMSCs cultured under 3 % O₂ tension shows regeneration (200X)

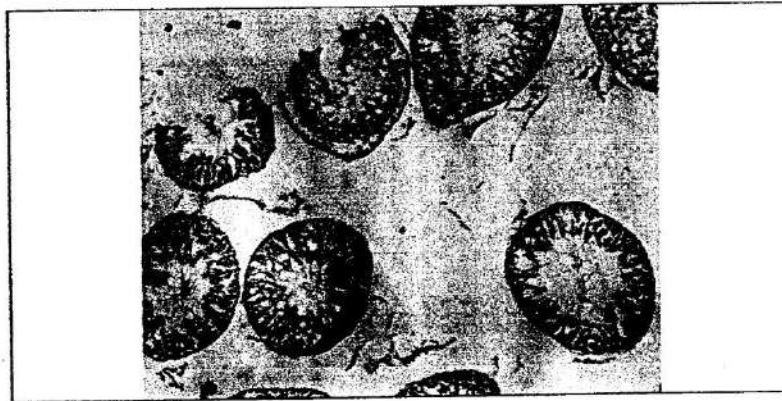


Fig. 5: Testicular tissue transplanted with MMSCs cultured under 21% O₂ tension shows no regeneration (200X)

Undifferentiated state of the stem cells was one of the main purposes in this research. Halim and co-workers (2010) stated that undifferentiation is one of the unique characteristics of stem cells that distinguish them from other cells of body organ. The existence of this unique undifferentiation made in vitro cultured stem cells capable to be viable longer compared to their progenitor or matured stem cells. This instance was based on researches conducted by Elliason et al. (2010) and Takubo (2011) revealed that for the transplanted stem cells viability to be maintained, the cultured stem cells have to be undifferentiated.

Undifferentiated state of stem cells, if fulfilled, further on will cause stem cells to be predicted to be able to differentiate into whatever cells needed when transplanted. This instance became the specialty of stem cells in vivo, that in the undifferentiated state, those cells can differentiate into more than one type of cells (multipotent/pluripotent). Therefore if undifferentiated state could be maintained in vitro, the expected capacity to differentiate into whatever cells needed upon transplantation will be fulfilled.

It can be said that stem cells inside the body are cells that have not had specific shapes and functions as in other cells of body organ (Halim *et al.*, 2010) such as myocardium cells to pulsate, neuron cells as the transmitter of nerve impulses and langerhans cells of pancreas to produce insulin (Guz *et al.*, 2001).

According to Lin *et al.* (2008), stem cells are different from the three cell types, stem cells have not had specific functions such as to pulsate, to transmit nerve impulses, producing hormones or other functions. Based on various researches it is said that stem cells population in a mature tissue inside the body showed an inactive cell population that start functioning in certain time and condition.

The existence of MMSCs *in vitro* in this research as inactive undifferentiated cells was aimed to keep regeneration continuity of tissue or organ composer. This instance can be done according to the undifferentiated stem cells capacity for later differentiation into body cells which are needed (Jones and Wagers, 2008). As the example ectoderm cells can differentiate into neuron cells (Halim *et al.*, 2010) or the endoderm cells such as hepatocyte cells (Schwartz *et al.*, 2002) and germline cells (spermatogonia, sertoli and Leydig cells) and germline tissues (seminiferous tubules) (Kilani, 2009).

Conclusion

The conclusion of this research showed that hypoxia precondition using 3% O₂ concentration very support MMSCs to remain adaptive after being transplanted to patient with spermatogenesis impairment, in addition to the testicle tissue improvement.

References

- Elliason P, M Rehn, P Hammar, P Larsson, O Sirenko, LA Flippin, J Cammenga, and JJ Johnson. 2010. Hypoxia Mediates Low Cell-Cycle Activity and Increases The Proportion of Long-Term-Reconstituting Hematopoietic Stem Cells During *in Vitro* Culture. *Exp.Hematol.* 38. 301-310
- Guz Y, I Nazir and, G Teitelman. 2001. Regeneration of Pancreatic β Cells from Intra-Islet Precursor Cells in Experimental Model of Diabetes. *Endocrinology*142(11):4956-4968 Halim DH, F Murty, A Sandra, T Boediono, B Djuwantono, dan B Setiawan. 2010. Stem Cell Dasar Teori dan Aplikasi Klinis. Penerbit Erlangga. Jakarta.
- Jones DL and AJ Wagers. 2008. No place like home: anatomy and function of the Stem Cell Niche. *Nature Reviews. Molecular Cell Biology.* Januari (9):11-21
- Kilani Z. 2009. Stem cell transplantation in human testis for the treatment of male infertility. *ISRCTN75604065.* <http://www.farah-hospital.com>
- Kenichiro H, N Noritoshi, I Takashi, T Itoh, S Murakami, Y Shimizu, W Taki, K Miyatake, K Kangawa. 2005. Adrenomedullin Enhances Therapeutic Potency of Mesenchymal Stem Cells after Experimental Stroke in Rats. *Stroke.* 36:853-858.
- Lin JL, MJ Wang, D Lee, CC Liang, and S Lin. 2008. Hypoxia Inducible Factor-1 α Regulates Matrix Metalloproteinase-1 Activity in Human Bone Marrow-Derived Mesenchymal Stem Cells. *FEBS Letters* 582: 2615-2619.
- Rantam FA, Ferdiansyah, Nasronudin and Purwati. 2009. Stem Cell Exploration. Methods of Isolation and Culture. First Ed. Airlangga University Press. Surabaya
- Safitri E, S. Utama, C. Bumi, Aulani'am and FA. Rantam. 2014. Hypoxic Preconditioning for Viable and Self Renewing Mesenchymal Stem Cells (MSCs) as The Regeneration of

- Spermatogenesis Process. Accepted International Journal May 2014. *Advances in Natural and Applied Sciences* (18 ANAS May 2014). Scientific Journal Impact Factor (SJIF 2012= 2,698).
- Schlatt S, L Foppiani, C Rolf, GF Weinbauer and Nieschlag. 2002. Germ Cell Transplantation into X-irradiated monkey testes. *Human Reproduction*. 17(1): 55-62.
- Schwartz RE, M Reyes, L Koodie, Y Jiang, and M Blackstad. 2002. Multipotent Adult Progenitor Cells from Bone Marrow Differentiate into Functional Hepatocyte-Like Cells. *J Clin Invest*. 109: 1291-1302.
- Takubo K. 2011. The Hypoxia Regulatory System in Hematopoietic Stem Cells. *Advances in Hematopoietic Stem Cell Research*. 133-146.
- Wenger RH and DM Katschinski. 2005. Review. The Hypoxic Testis and Post-Meiotic Expression of PAS Domain Proteins. *Seminar in Cell & Developmental Biology*. 1084-9521/S – see front matter @2005 Elsevier Ltd. All rights reserved. DOI: 10.1016/j.semedb.2005.03.008. 547-553.