The Cambodian and International Seminar for Nephrology and Dialysis 2015

Date:September 22, 2015

Venu:International University (IU): No 89-95, St.1984-1911. Phnom Penh Thmey, Sen Sok, Phnom Penh, Cambodia



The Cambodian and International Seminar for Nephrology and Dialysis **2015 Preliminary Program**

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MKISSEI PHARMACEUTICAL CO., LTD.

8:30-9:00 Registration

Opening Ceremony 9:00-9:10

Cambodian and Japanese Oral Presentations 9:10-10:10

- 1: Thim Pich Thida and Rith Susan (Medical Students, IU, Cambodia): Introduction to Maintenance Haemodialysis for a Poor Cambodian Patient: The Nutritional Status Under the Present Dialysis Condition
- 2: Dr. Sovandy Chan (IU, Cambodia): The Dialysate Purification and Introduction of High Flux Dialyzers in Cambodia
- 3: Prof. Toru Hyodo (Eijin Clinic & Kitasato University, Japan): A Simple Method of Dietary Management for Glycemic Control in Diabetic Hemodialysis Patients: The Usefulness of Basic Carbohydrate Counting

10:10-10:35 Japanese Assistance Council of establishing Dialysis Specialists system in Cambodia (JAC-DSC) Education Lecture 1

Prof. Kenichi Kokubo: Principles and Methods of Hemodialysis (Kitasato University, Japan)

10:35-11:00 Nipro Corporation Industrial Seminar

Mr. Kaname Sadahiro (Nipro Corporation): Dialysis Machine & Medical Devices of Nipro Corporation

11:00-11:15 Break

11:15-12:00 Special Education Lecture

Prof. Masafumi Fukagawa(Tokai University, Japan): Prevention and Management of Chronic Kidney Disease (CKD)

12:00-12:10 Break

12:10-13:00 DKSH Cambodia (Roche) Luncheon Seminar

Prof. Hideki Kawanishi (Tsuchiya General Hospital): Anemia Management for CKD

13:00-13:10 Break

13:10-13:35 International Kidney Evaluation Association Japan (IKEAJ) Lecture

Mr. Nobuo Ito (IKEAJ, Japan): CKD Screening Program in Japan --- Activities of IKEAJ ---

13:35-14:25 Japan Association for Clinical Engineers Education Lectures

Ms. Moe Kojima (Tokai University Oiso Hospital, Japan): The Role of Clinical Engineer as a Profession

Prof. Tomotaka Naramura (Junshin Gakuen University, Japan): Dialysis Fluid Purification

14:25-14:50 JAC-DSC Education Lecture 2

Dr. Kanenori Maeda (Maeda Clinic, Japan): Long-hour Hemodialysis

14:50-15:05 Break

15:05-15:30 JAC-DSC Education Lecture 3

Dr. Minoru Ito (Yabuki Hospital, Japan): The Nutritional Assessment of Dialysis Patients using a Malnutrition-Inflammation Score (MIS)

15:30-15:55 JAC-DSC Education Lecture 4

Prof. Toshihide Naganuma (Osaka City University Hospital, Japan): Vascular Access

15:55-16:00 Closing Remarks

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16:00-16:30 Delivery of Certifications to All Audience

Cngress President, Vice President of the Japanese Assistance Council of Establishing Dialysis Specialist System in Cambodia (JAC-DSC)

Toru Hyodo, M.D., Ph.D.

Director, Eijin Clinic, Hiratsuka, Japan / Invited Associate Professor, Department of Urology, Kitasato University, Sagamihara, Japan Congress President of the Japanese Society for Hemodialfiltration 2011 / Council Member, Japanese Society for Dialysis Therapy (JSDT) Council Member, Japanese Society for Hemodiafiltration / Council Member, Japanese Society for Peritoneal Dialysis Council Member, Japanese Society for Dialysis Access / Council Member, Japanese Society for Renal Nutrition Vice Chairperson of JSDT Committee to Support Young Doctors and Co-medical Staffs in Dialysis Fields in Developing Countries Secretary General, NGO Ubiquitous Blood Purification International, Yokohama, Japan / Guest Professor, International University, Phnom Penh, Cambodia



It is my great pleasure to organize the Cambodian and International Seminar for Nephrology and Dialysis in Phnom Penh.

This seminar is open for the persons including doctors, medical students, nurses, nursing students and staffs who are related not only to nephrology and dialysis therapy but also all medical fields in Cambodia.

I have the good news for such persons at this time. I belong to the committee of Japanese Society for Dialysis Therapy (JSDT) to support dialysis staffs in the developing countries. Cambodia is selected as the country that JSDT will support. The content of this support is to invite to the dialysis centers for 7 days in Japan. JSDT will support 100000 yen per a person for this staying in Japan. The travel fee from Cambodia to Japan must be prepared by him or herself. The selection of the candidate for this program will be performed by the recommendation from the dialysis or nephrology related association, the hospital or the university that the candidate attends to. This committee of JSDT welcomes not only doctors but also the co-medical staffs as nurses and other professions. Maybe I think that 2 or 3 persons will be invited to Japan per a year from Cambodia.

The medical instruments and machines are very sophisticated and complicated. These devices are too difficult to operate only by doctors and nurses. The clinical engineer is the profession to operate such complicated devices and take care patients. The department of clinical engineering is common in every hospital and clinic in Japan. There are many universities that have the clinical engineering course as the faculty in Japan. The medicine cannot go ahead without clinical engineers in the present medical world. I am looking forward to seeing the faculty of clinical engineering in Cambodia. So I invited two clinical engineers "Prof. Naramura and Ms. Kojima as the education ambassadors from Japan Association for Clinical Engineers (JACE).

> ខ្ញុំពិតជាមានសេចក្តីសោមនស្សរីករាយជាខ្លាំងដោយមានកិត្តិយសរៀបចំសិក្តាសាលាអន្តរជាតិកម្ពុជា សំរាប់ Nephrology និងការលាងឈាម (Cambodian and International Seminar for Nephrology and Dialysis) ឡើងនាងរាជធានីភ្នំពេញ។ សិក្ដាសាលានេះគឺប្រារព្ធឡើងក្នុងគោលបំណងចែករលែក ចំណេះដឹងទៅដល់ វេជ្ជបណ្ឌិត និស្សិតផ្នែកវេជ្ជសាស្ត្រ គឺលានុបដ្យាយិកា ស៊ិស្សនិស្សិតផ្នែកឆុប និង បុគ្គលិកទាំងឡាយដែលជាប់ពាក់ព័ន្ធផ្នែកវេជ្ជសាស្ត្រទាំងអស់នៅក្នុងប្រទេសកម្ពុជា។ ខ្ញុំមានដំណឹង ល្អសម្រាប់អ្នកទាំងអស់គ្នា។ ខ្ញុំជាសមាជិកគណ:កម្មាធិការសម្រាប់ការលាងឈាមប្រចាំប្រទេស ជប៉ុន (Japanese Society for Dialysis Therapy) ហៅកាត់ (JSDT) គាំទ្រដល់បុគ្គលិកផ្នែកលាង ឈាមនៅកងប្រទេសកំពុងអភិវឌ្យន៍។ កងនោះក៏មានប្រទេសកម្មជាផងដែរ ។ គំរោងនេះគឺធើទ្បឹង ដើម្បីអញ្ចើញអ្នកដែលជាប់ពាក់ព័ន្ធទៅចុំះកម្មសិក្សាមណ្ឌលលាង់ឈាមនាងប្រទេសជប៉ុនរយៈពេល 7 ថ្ងៃ ។ JSDT នឹងផ្តល់ 100000 យ៉េន ក្នុងមួយរូបសម្រាប់ការស្នាក់នៅក្នុងប្រទេសជប៉ុននេះ។ ថ្លៃ ដំណើរពីប្រទេសកម្ពុជាទៅកាន់ប្រទេសជប៉ុនត្រូវរ៉ាប់រងដោយខ្លួនឯង់ៗ ការជ្រើសរើសបេក្ខជន សម្រាប់កម្មវិធីនេះនឹងត្រូវអនុវត្តដោយយោងតាមអនុសាសន៍ពីសមាគមលាងឈាម ឬ Nephrology ដែលពាក់ព័ន្ធ ក៏ដូចជាមន្ទីរពេទ្យបុសាកលវិទ្យាល័យដែលបេក្ខជនកំពុងតែសិក្សា។ គណ:កម្មាធិការ JSDT នឹងធ្វើការស្វាគមន៍ចំពោះ វេជ្ជបណ្ឌិត សហការីពេទ្យ គិលាន្ទបដ្យាយិកា និងអ្នកដែលមានវិជ្ជាជី វៈដទៃទៀត។ ខ្ញុំគិតថា ប្រហែលជាមានបេក្ខជនពីប្រទេសកម្ពុជា 2 ឬ 3 នាក់នឹងត្រូវបានអញ្ជើញទៅ កាន់ប្រទេសជប៉ុនក្នុងមួយឆ្នាំម្តង។

ឧបករណ៍វេជ្ជសាស្ត្រនិងម៉ាស៊ីនវេជ្ជងៗទៀតគឺពិតជាមានភាពសូគស្វាញក្នុងការប្រើប្រាស់ណាស់។ ឧបករណ៍ទាំងនេះគឺពិបាកសម្រាប់វេជ្ជបណ្ឌិតនិងគឺលានុបដ្វាយិកាក្នុងការយកទៅប្រើប្រាស់ផងដែរ ។ មានតែវិសុករផ្នែកវេជ្ជសាស្ត្រដែលមានវិជ្ជាជីវៈប៉ុណ្ណោះដែលអាចប្រតិបត្តិការឧបករណ៍ដ៏សុគ្រ ស្មាញទាំងនេះ ដើម្បីធ្វើការថែទាំអ្នកជំងឺបាន។ ផ្នែកវិស្វករផ្នែកវេជ្ជសាស្ត្រនេះគឺតែងតែមាននៅក្នុង គ្រប់មន្ទីរពេទ្យនិងគ្លីនិកព្យាបាលជំងឺទាំងឡាយនាងប្រទេសជប៉ុន ហើយក៏មានសាកលវិទ្យាល័យជា ច្រើនដែលមានបង្រៀនជំនាញវិស្វករផ្នែកវេជ្ជសាស្ត្រផងដែរនៅក្នុងប្រទេសជប៉ុន ។ បើគ្មានវិស្វករ ផ្នែកវេជ្ជសាស្ត្រទេ ថ្នាំពេទ្យក៏មិនអាចឈានជំហានទៅមុខបានដែរនៅក្នុងពិភពវេជ្ជសាស្ត្រនាពេល បច្ចុប្បន្ននេះ។ ខ្ញុំកំពុងរង់ចាំវត្តមាននៃមហាវិទ្យាល័យវិស្វករវេជ្ជសាស្ត្រក្នុងប្រទេសកម្ពុជា។ ហេតុ ដូច្នេះខ្ញុំក៏បានអញ្ជើញវិស្វករផ្នែកវេជ្ជសាស្ត្រ២រូបគឺ "លោកសាស្ត្រាចារ្យ ណារ៉ាមុរ៉ា (Naramura) និង លោកស្រីខូយីម៉ា(Kojima) ដែលជាឯកអគ្គរដ្ឋទូតប្រចាំសមាគមវិស្វករផ្នែកវេជ្ជសាស្ត្រនៃប្រទេស ជប៉ុន (Japan Association for Clinical Engineers) ហៅកាត់ (JACE)

President of the JAC-DSC

Hideki Kawanishi, M.D., Ph.D.



Director of kidney center and surgery, Tsuchiya General Hospita Clinical professor of Faculty of Medicine, Hiroshima University, Hiroshima Japan

Dear Participants.

Vol.Pre1, No.Pre1, September 2015

Congratulation for the second seminar in International University. This seminar will be informed the important message for ESRD field in Cambodia and South Asia countries.

The number of patients being treated for ESRD globally was estimated to be 3,200,000 at the end of 2013 and, with a 6% growth rate, continues to increase at a significantly higher rate than the world population. In particular, the remarkable increasing rate was shown in Asian countries. However, the access to treatment is still limited in many developing countries and a number of patients with terminal renal failure do not receive treatment. In order to save these patients, it is necessary to enhance the dialysis system, the educated staff and association of each countries. Japanese Assistance Council of Establishing Dialysis Specialist System in Cambodia (JAC-DSC) was started the education programs of "Dialysis, Renal Transplantation, Clinical Engineering, and Diet Therapy for DM and CKD" We will expect to be built the cooperation between JAC-DSC and Cambodian Nephrology Team.

គោរពជូនអ្នកដែលបានចូលរួមទាំងអស់គ្នា

សូមអបអរសាទរចំពោះការបើកសិក្តាសាលាលើកទីពីរដែលបានប្រារព្ធនៅឯសាកលវិទ្យាល័យអន្តរ ជាតិនេះ។ សិក្ខាសាលានេះនឹងជូនដំណឹងដ៍មានសារៈសំខាន់ស្តីពី ESRD នៅក្នុងប្រទេសកម្ពុជានិងប ណ្តាប្រទេសដែលស្ថិតនៅតំបន់អាស៊ីខាងត្បូងផ្សេងៗទៀត។

ចំនួននៃអ្នកជំងឺ ESRD ដែលត្រូវបានទទួលការព្យាបាលនៅទូទាំងពិភពលោកត្រូវបានគេប៉ាន់ប្រមាណ 3.200.000នាក់ ត្រឹមចុងឆ្នាំ201ំ3 ជាមួយនឹងអត្រាក់ណើន 6% ។ ហើយជំងឺនេះនៅតែបន្តកើនឡើងក្នុង អត្រាមួយដ៏ខ្ពស់បើធៀបទៅនឹងអត្រាប្រជាជនពិភពលោក។ ជាពិសេស អត្រានៃការកើនឡើងគួរឱ្យ កត់សម្គាល់នេះ ត្រូវបានបង្ហាញថាស្ថិតនៅក្នុងបណ្តាប្រទេសអាស៊ី។ ទោះជាយ៉ាងណាក៏ដោយ ការ ទទួលបាននូវការព្យាបាលនេះនៅមានកំណត់នៅក្នុងបណ្តាប្រទេសកំពុងអភិវឌ្ឍន៍ជាច្រើន ហើយ ចំនួននៃអ្នកជំងឺដែលមានបញ្ហាតំរងមួយចំនួនមិនបានទទួលនូវការព្យាបាលថែមទៀតផង។ ដើម្បី ជួយសង្គ្រោះអ្នកជំងឺទាំងនោះ យើងចាំបាច់ត្រវបង្កើនប្រព័ន្ធលាងឈាម បុគ្គលិកដែលមានចំណេះ ដឹង និងសមាគមប្រចាំប្រទេសនីមួយៗ។

ក្រុមប្រឹក្សាជំនួយការរបស់ប្រទេសជប៉ុនក្នុងការ បង្កើតប្រព័ន្ធឯកទេសលាងឈាមនៅកម្ពុជា (Japanese Assistance Council of establishing Dialysis Specialists system in Cambodia) ហៅកាត់ (JAC-DSC) ក៏បានចាប់ផ្តើមកម្មវិធីអប់រំស្តីពី "ការលាងឈាម, ប្រព័ន្ធភាពស៊ាំនៃតំរងនោម, វិស្ការផ្នែកវេជ្ជសា ស្ត្រ, របបអាហារព្យាបាលជំងឺទឹកនោមផ្អែម និង CKD" ។

យើងខ្ញុំរំពឹងថា កិច្ចសហប្រតិបត្តិការរវាង JAC-DSC និងក្រុម Nephrology ប្រចាំប្រទេសកម្ពុជានឹងត្រូវ បានបង្កើតឡើង។

Associate Professor of International University, Cambodia

Sovandy Chan, M.D.



Director, Cambodia-Japan Friendship Blood Purification Center, Sen Sok International University Hospital, Phnom Penh, Cambodia Vice President, Sen Sok International University Hospital, Phnom Penh, Cambodia

It is my great pleasure to organize the Cambodian and International Seminar for Nephrology and Dialysis at International University (IU) Hall in Phnom Penh. This seminar is organized with Japanese Assistance Council of establishing Dialysis Specialists system in Cambodia (JAC-DSC), Japan Association for Clinical Engineers (JACE) and International Kidney Evaluation Association Japan (IKEAJ).

This seminar is open for the persons including doctors, medical students, nurses, nursing students and staffs who are related not only to nephrology and dialysis therapy but also all medical fields in Cambodia.

The two dialysis related papers from IU will be presented in this scientific meeting. One is the paper that was accepted and presented in American Society of Nephrology, Annual Meeting 2014 and the other is the case report that was presented by two IU medical students in the 3rd Annual Meeting of Japanese Society for Renal Nutrition 2015. Cambodia-Japan Friendship Dialysis Center of Sen Sok International University Hospital was established in 2010. Our dialysis center is young, but we have accomplished not only daily clinical dialysis works but also the scientific and educational activities.

I hope this seminar will benefit medical professional workers, students and the citizens of Cambodia

ខ្ញុំពិតជាមានសេចក្តីសោមនស្សរីករាយជាខ្លាំងដោយមានកិត្តិយសរៀបចំសិក្ខាសាលាអន្តរជាតិកម្ពុជា សំរាប់ Nephrology និងការលាងឈាម (Cambodian and International Seminar for Nephrology and Dialysis) ឡើងនាងរាជធានីភ្នំពេញនៅក្នុងសាលប្រជុំរបស់សាកលវិទ្យាល័យអន្តរជាតិ។

សិក្ខាសិលានេះត្រូវបានរៀបចំឡើងដោយ ក្រុមប្រឹក្សាជំនួយការរបស់ប្រទេសជប៉ុនក្នុងការ បង្កើត ប្រព័ន្ធឯកទេសលាំងឈាមនៅកម្ពុជា (Japanese Assistance Council of establishing Dialysis Specialists system in Cambodia) ហៅកាត់ (JAC-DSC), សមាគមជប៉ុនសម្រាប់វិស្វករផ្នែកវេជ្ជសា ស្ត្រ (Japan Association for Clinical Engineers) ហៅកាត់ (JACE) និង សមាគមវាយតម្លៃតម្រង នោមអន្តរជាតិប្រចាំប្រទេសជប៉ុន (International Kidney Evaluation Association Japan) ហៅកាត់ (IKEAJ) ។ សិក្ខាសាលានេះគឺប្រារព្ធឡើងក្នុងគោលចំណងចែករលែកចំណេះដឹងទៅដល់ វេជ្ជបណ្ឌិត និស្សិតផ្នែកវេជ្ជសាស្ត្រ គិលានុបដ្ឋាយិកា សិស្សនិស្សិតផ្នែកឆ្មប និង បុគ្គលិកទាំងឡាយដែលជាប់ ពាក់ព័ន្ធផ្នែកវេជ្ជសាស្ត្រទាំងអស់នៅក្នុងប្រទេសកម្ពុជា។

ឯកសារដែលទាក់ទងនឹងការលាងឈាមរបស់សាកលវិទ្យាល័យអន្តរជាតិ (IU) ចំនួន២ នឹងត្រូវលើក បង្ហាញនៅក្នុងកិច្ចប្រជុំតាមបែបវិទ្យាសាស្ត្រ ។ មួយគឺឯកសារដែលត្រូវបានទទួលស្គាល់និងបានធ្វើ បទបង្ហាញនៅក្នុងសង្គមអាមេរិកស្តីពី Nephrology នៅក្នុងកិច្ចប្រជុំប្រចាំឆ្នាំ 2014 និងមួយទៀតគឺជា របាយការណ៍ដែលត្រូវបានធ្វើបទបង្ហាញដោយនិស្សិតផ្នែកវេជ្ជសាស្ត្រចំនួន២រូបរបស់សាកលវិទ្យាល័យអន្តរជាតិ (IU) នៅក្នុងកិច្ចប្រជុំលើកទី 3 នៃនាងប្រទេសជប៉ុនសម្រាប់ឆ្នាំ 2015 Renal ស្តីពីអាហា រូបត្ថម្ភសម្រាប់តម្រងនោម ។ មជ្ឈមណ្ឌលលាងឈាមមិត្តភាពកម្ពុជាជប៉ុននៃមន្ទីរពេទ្យសាកលវិទ្យាល័យអន្តរជាតិសែនសុខត្រូវបានបង្កើតឡើងក្នុងឆ្នាំ 2010។ ទោះបីជាមជ្ឈមណ្ឌលលាងឈាមរបស់ យើងនៅមានយក្មេងមែនពិត ក៏ប៉ុន្តែយើងបានសម្រេចកិច្ចការមកជាច្រើន មិនត្រឹមតែសកម្មភាព លាងឈាមនាឯមន្ទីរពិសោធន៍ប្រចាំថ្ងៃប៉ុណ្ណោះទេ ថែមទាំងមានសកម្មភាពផ្នែកវិទ្យាសាស្ត្រនិងការ អប់រំជងដែរ។

ខ្ញុំសង្ឃឹមថាសិក្ខាសាលានេះអាចផ្តល់អត្ថប្រយោជន៍ទៅដល់បុគ្គលិកដែលមានជំនាញផ្នែកវេជ្ជសា ស្ត្រ សិស្សនិស្សិតនិងប្រជាពលរដ្ឋកម្ពុជាទាំងមូល។

From Japan Association for Clinical Engineers (JACE)

Tomotaka Naramura, C.E., Ph.D.^{1), 2), 3)} and Tadayuki Kawasaki, C.E.⁴⁾

Council Member and International Committee, Japan Association for Clinical Engineers (JACE) ¹⁾
Department of Medical Engineering, Junshin Gakuen University, Fukuoka, Japan ²⁾
Guest Professor, International University, Phnom Penh, Cambodia ³⁾
President, Japan Association for Clinical Engineers (JACE) ⁴⁾



Dear Participants:

Congratulations for the holding of the Cambodian and International Seminar for Nephrology and Dialysis in Phnom Penh.

It would not be too much to say that routine daily treatment is not possible without medical equipment now. However, with progress in medical science, medical equipment has become complex, leading to an indispensable need for medical staff specializing in both engineering and medical science. Therefore, in Japan, the Clinical Engineers Act for clinical engineers was established approximately 30 years ago to allow clinical engineers to specialize in medical equipment. The main work of clinical engineers in Japan is operation and maintenance of medical equipment, including life support equipment. Furthermore, a characteristic of clinical engineers in Japan is that they are able to administer medical care to patients as medical staff. Dialysis therapy involves the use of a dialysis machine as life support equipment; therefore, it is indispensable for medical staff to have knowledge not only regarding medical science but also engineering to ensure safe and efficient treatment.

We will be delighted if this meeting can be helpful for gaining knowledge about techniques related to dialysis therapy for participants.

From International Kidney Evaluation Association Japan (IKEAJ)

Susumu Takahashi, M.D.



President, International Kidney Evaluation Association Japan (IKEAJ)

Greeting

It is my great honor to be able to offer greetings for this meeting on behalf of International Kidney Evaluation Association Japan. Chronic Kidney Disease is a severe public health problem. It is recognized as a priority issue for national health by WHO in its basic intervention strategy for non-communicable diseases.

There are five stages of severity for CKD, from having persistent kidney impairment (stage 1), to a slight reduction in kidney function (stage 2), or a moderate to severe reduction in kidney function (stages 3a, 3b, and 4). Finally, as everyone is well aware, Stage 5 CKD indicates severe, progressively worsening kidney impairment, and requires life-sustaining dialysis or a kidney transplant.

CKD patients suffer from serious symptoms and a high mortality rate. It is also a fact that in each country around the world, CKD has a major impact in terms of insurance costs, quality of life, and medical fees.

I strongly convinced that exchanging your experience and knowledge of both Cambodian and Japanese people concerned nephrology gathered together here will greatly contribute the progress of nephrology research and treatment not only in both countries but also in other Asian countries.

I hope that this will be a very fruitful meeting for you all

Masafumi Fukagawa, M.D., Ph.D.

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Professor of Medicine, Division of Nephrology, Endocrinology and Metabolism, Tokai University School of Medicine, Isehara, Japan

It is my great pleasure to attend Cambodian and International Seminar for Nephrology and Dialysis in Phnom Penh.

I hope such activities will benefit the citizens of your country, not only in the availability of dialysis therapy, but also in the prevention and management of chronic kidney disease.