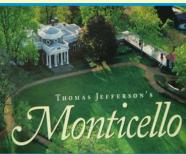
# SNUCMAA of NA OO OO Annual Convention and Scientific Meeting Program and Abstracts







June 2 (Thur) ~ 5 (Sun), 2016

**The Westin Tysons Corner Hotel** 

Falls Church, Virginia, USA



Presented by Seoul National University College of Medicine Alumni Association of North America

Sponsored by University at Buffalo, School of Medicine

## **Greetings of the President**

33rd Convention 준비에 심혈을 기울이신 여러분 감사합니다.

특히 the Scientific Part를 준비하신 한승신(76) Co-Chair와 신규호(68) Co-Chair, 한창규(81) Associate Chair 수고 많이 하셨습니다. Non-CME Program Part 준비에 밤 낮으로 뛰어다니신 김진수(66) Convention Co-Chair, 조병선(71) Co-Chair 감사합니다.

멀리 서울에서 오신 강신호 명예회장님, 박용현 명예회장님, 강대희 학장님, 손재옥 미주 서울대학교동창회장님, 박중신 부학장님, 조영민 부학장님, 김용재 부회장님, 그리고 학술대회에서 강의를 맡으신 이홍규 교수님을 비롯하여 서울과 미주 전역에서 참석하신 동문 여러분들을 환영합니다. 이번에 발표하시는 내용이 좋은 촉매가 되어 후일 귀하의 경력에 빛이 더하여지기를 희망합니다. 특히 이번에 참여하신 미래 세대(Green Project) 여러분들께 축하의 말씀을 드립니다. 또 우리 동문들의 자제분으로 성장하시어 권위있는 Speaker로 참여하신 Dr. James Shin과 Dr. James Lah, 우리는 두분을 특별히 자랑스럽게 생각합니다. 참으로 감사합니다. 바쁜 중에도 훌륭한 내용이 담긴 Poster Presentation으로 참여하신 여러분들을 환영합니다. 김진수 선배님께서 크기에 맞는 Foam Board를 준비하기 위하여 백방으로 수고하셨습니다.

모든 동창회의 행사가 그 나름대로 다 중요하지만 특히 이 다채로운 Convention은 그 중 으뜸으로 의미가 깊은 것입니다. 이번 Convention을 통하여 젊은 동문들과 선배 동문들께서 같이 학문적으로 의견을 나누시고 소통하시고 창조하시기를 바랍니다. 예술사진 응모에 출품하신 여러분들 감사합니다. 출간하신 저서를 소개하시고 수입을 동창회에 기금으로 넣으신 여러 동문님들께 감사드립니다. Non-CME에 강의를 맡아주신 여러 동문들 감사합니다. 특별히 초청되어 오신 황보 한 박사님, 이규양 교수님, 최빈도 박사님, 이소영 변호사님, Mrs. Catherine Park 원장님, 감사드립니다. 끝으로 이 행사에 관련된 모든 출판물을 마련하신 황창근 사장님, 또 맡은 일을 성실히 빈틈없이 처리하시는 Mrs. Jamie Kim 사무장님 감사합니다. 지난 1년간 이행사를 위하여 노심초사하시며 모든 정열을 아낌없이 쏟아주신 존경하는 44대 동창회 임원 여러분들께 감사합니다. 우리가 이번에 마련한 이 Convention이 후일에도 기억하게 되는 성공적인 행사가 되기를 바랍니다.

2016년 6월 1-5일 서울대학교 의과대학 북미주 총동창회 회장 서윤석

# **Message from the Convention Chair**

문화와 정치의 중심지인 수도 Washington, DC에 오신 동문 내외 여러분 그리고 멀리 모국에서 오신 강신호 명예 회장님, 전 동창회 회장님, 현 동창회 부회장님과 학장, 부학장님을 비롯한 제 동문님들께 감사와 더불어 환영하는 바입니다.

우리 북미주동창회는 아시다시피 점점 고령화 됨과 동시에 후진들의 미국 이주가 현저히 줄었지만 1,000여명의 회원을 가진 아직도 대 가족으로 건재합니다. 선배들은 후배에게 배려와 격려를 아끼지 않고 후배들은 선배에게 존경과 경청을 하는 동창회로 계속 발전하기를 바랍니다.

금년 Convention의 각 Committee 임원진과 특히 동창회 본부 Office Manager인 Ms. Jamie Kim의다년간 숙달한 경험을 바탕으로 한 큰 도움에 감사합니다. 이번 Convention의 Non-CME Session은 북미주동창회 회원들과 회원이 아닌 5명의 저명한 인사들을 초빙하여 더욱 흥미롭고 다채로운 프로그램을 준비했습니다. 아무쪼록 뜻 깊고 추억에 남는 모임이 되길 바라면서 환영의 인사를 드립니다.

Convention chair 김진수(66), 조병선(71) 올림

# **Message from the Scientific Committee Chairs**







Dear SNUCM Alumni,

Welcome to the Scientific Session of the 33rd Annual Convention of the SNUCMAA of North America. The theme of this year's the meeting is "New Horizons in Medicine". The theme of the meeting was chosen because these are the fields, which promises major changes in medical practice in the future and deserves active research. At the same time, many young alumni are working in these or related fields. Under the theme, we chose three main areas to work on, Personalized Medicine, New developments in Medical Imaging and Regenerative Medicine/Stem Cell Research.

We were successful in organizing a panel presentation and case discussions on Personalized Medicine. This is the 1st panel presentation in SNUCMAA scientific meetings assembling expertise in the related fields of cancer care including pathologists, medical oncologists, radiation oncologists, basic researchers and a healthcare administrator. Each panelist will present topics of his/her area of expertise followed by discussions of practical application of scientific data to actual cases. I thank Dr. Myong Ho Nam for organizing excellent panel for the program. There are few presentations included in this year's program on the topic of New Developments in Medical Imaging. However, Regenerative Medicine/Stem Cell Research area is barely touched in this year's program due to the time limitation in the scientific program and the lack of experts to invite to give us a talk in this field. This does not mean that Regenerative Medicine is not an important topic for us or we are not able to handle this topic among our Alumni. It just will take more time to find good speakers on this topic and this will be dealt with in the future.

In addition to the above topics, we present talks on Alzheimer's disease, Stroke, Neurosis associated with smart phone use, Diabetes, COPD, Lung Cancer, Orthostatic Hypotension, Zika virus, and etc.

Also, we provide Poster Session in this scientific program to allow and encourage many young alumni to participate in this meeting considering the limited number of oral presenters allowable due to time constraints. There are 9 poster presentations this year with various Topics including proton beam treatment for AVM, Vaccine treatment for prostate cancer, researches in depression, diabetes and so on. This presentation would not have been possible without relentless work by Dr. Young-Jae Nam and Dr. Chang-Gyu Hahn.

Administratively, we had a great support from the President (Dr. Youn Seok Seo), the Convention Chairs (Dr. Jin Soo Kim, and Dr. Byung Suen Cho), Scientific committee Co-chair (Dr. Kyu Ho Shin) who took care for CME credits for the meeting, and Jamie Kim who assembled all the information regarding the meeting and assured the announcement and the final print of the program is without errors.

It has been our great pleasure to work with so many talented alumni to make this program successful. We would like to express our sincere appreciation to all speakers, presenters, moderators, scientific committee members (Dr. Mooyeon Oh-Park, Dr. Sunhee Lee and other members mentioned in the above message) and administrative supporters. We hope you enjoy the Scientific Meeting and the Convention.

Sincerely,

Seung Shin Hahn, MD Co-chair, Scientific Committee **Kyu Ho Shin, MD** Co-chair, Scientific Committee Chang-Gyu Hahn, MD Associate chair, Scientific Committee

# **GENERAL PROGRAM**

## June 2, 2016(Thursday)

4:00 pm - 5:00 pm	Delegate Meeting
4:00 pm - 6:00 pm	Registration
6:30 pm - 9:00 pm	Class Reunion

## **June 3, 2016(Friday)**

8:00 am - 12:00 noon	Registration
3:00 pm - 5:30 pm	Registration
7:00 am - 9:00 am	Continental Breakfast
7:50 am - 12:30 pm	Scientific program session I
8:00 am - 12:00 noon	Non CME program session I
12:00 noon-1:30 pm	Lunch
1:30 pm - 5:30 pm	Scientific program session II
1:00 pm - 4:00 pm	Non CME program session II
4:00 pm - 5:00 pm	Meeting with the book authors
6:00 pm - 11:00 pm	Banquet

## June 4, 2016(Saturday)

8:00 am - 12:00 noon 3:00 pm - 5:30 pm	Registration Registration
7:00 am - 9:00 am 8:00 am - 12:00 noon 8:05 am - 12:00 noon 1:00 pm - 6:00 pm 6:00 pm - 7:00 pm 7:00 pm - 11:00 pm	Continental Breakfast Scientific program session 3 Non CME program session 3 Washington D.C. tour (Lunch included) Reception Grand Banquet

## **June 5, 2016(Sunday)**

645 am -7:45 am	President forum(Breakfast included)
8:30 am - 8:00 pm	All day tour(Lunch, Dinner included)

#### **GENERAL INFORMATION**

The 33rd Annual scientific symposium of the Seoul National University College of Medicine Alumni Association of North America (SNUCMAA-NA) has provided oral presentations including Panel discussions on "Personalized Medicine" and a poster exhibition. Oral presentations will be held in the Oaks Ballroom and the poster exhibition will be held in the corridor next to the Birches and the Pines Rooms. Oral presentations will begin at 7:50 AM on June 3, 2016 (Friday) and will follow the schedule according to the program printed for Scientific Sessions (p10-11). The poster exhibition will officially begin at 5:30 PM on June 3, 2016 and will last for one day.

#### This meeting is accredited for a maximum of 12.0 AMA PRA Category 1 Credit(s)TM.

The Non-CME portion of the symposium will be held in the Birches room and will begin at 8:00 AM on June 3, 2016 (Friday) and will follow the schedule according to the program printed for Non-CME Session (p12).

#### ACCREDITATION

This activity has been planned and implemented in accordance with the accreditation requirements and policies of the Accreditation Council for Continuing Medical Education (ACCME) through the joint providership of the University at Buffalo School of Medicine and Biomedical Sciences and CCS Oncology.

The University at Buffalo School of Medicine and Biomedical Sciences is accredited by the ACCME to provide continuing medical education for physicians.

#### **CERTIFICATION**

The University at Buffalo School of Medicine and Biomedical Sciences designates this live activity for a maximum of 12.0 AMA PRA Category 1 Credit(s)TM. Physicians should claim only the credit commensurate with the extent of their participation in the activity.

To receive the due certificate, each attendee should complete two forms, Credit Claim Form and

Evaluation Form: These Forms will be ready to be picked up at the entrance of the Oaks Ballroom.

#### Credit Claim Form:

This form needs to be completed by all attendees who are looking to receive a CME certificate and should be submitted to the registration desk at the end of the conference.

#### **Evaluation Form:**

Please complete this Form and submit to the registration desk at the end of the conference whether you wish to receive a CME certificate or not. This will provide us with important information on how to plan successful future symposia. Also, the CME Certificates will only be issued after we submit the analysis of this information to University at Buffalo, School of Medicine and Biomedical Sciences.

#### PLANNING COMMITTEE & SPEAKER DECLARATIONS

The Accreditation Council for Continuing Medical Education (ACCME) and the U at Buffalo School of Medicine and Biomedical Sciences Standards for Commercial Support require that presentations are free of commercial bias and that any information regarding commercial products/services be based on scientific methods generally accepted by the medical community.

The following speaker(s) have disclosed financial interest/arrangements or affiliations with organization(s) that could be perceived as a real or apparent conflict of interest in the context of the subject of their presentation(s). Only the current arrangements/interests are included.

\*Planning Committee

Cho, Soojung, MD: Nothing to Report
Cho, Young Min, MD, PhD: Nothing to Report
Choi, Noah Chan H., MD: Nothing to Report
Hahn, Chang-Gyu, MD, PhD: Nothing to Report
Hahn, Seung Shin, MD: Nothing to Report
Hong, Jeong Youn, MD, PhD: Nothing to Report
Huh, Won Jae, MD, PhD: Nothing to Report
Jang, Sekwon, MD: Nothing to Report
Jeong, Youngtae, MD, PhD: Nothing to Report
Kang, Daehee, MD, PhD: Nothing to Report
Kang, Hyunseok, MD, MS: Employee of Counsyl, Inc.
Kang, Min-Jong, MD, PhD, MPH: Nothing to Report
Kang, Yoogoo, MD: Nothing to Report
Kim, Damian Byungsuk, MD: Nothing to Report

Lee, Hong Kyu, MD, PhD: Nothing to Report
Lee, Seon Kyu, MD, PhD: Nothing to Report
Lee, Sunhee, MD: Nothing to Report
Moon, Dai Ok, MD: Nothing to Report
Nam, Myongho, MD: Nothing to Report
Nam, Young-Jae, MD, PhD: Nothing to Report
Oh-Park, Mooyeon, MD: Nothing to Report
Park, Chong Chul, MD: Nothing to Report
Park, Eunkyung, MD, PhD: Nothing to Report
Shin, James, MD, MSC: Nothing to Report
Sinn, Dongin, MD: Nothing to Report
Shin, Kyu Ho, MD\*-Activity Director: Nothing to
Report
Song, Kyungmin, MD, MPH, MBA: Nothing to Report

**Lah, James, MD, PhD**: Grant/Research Support from Ceregene, Inc. Merck & Co., Inc., Eli Lilly, Lundbeck, Inc., Eisai America, Inc., Takeda America, Inc., TAURX Therapeutics, LTD Neuro Vision, Inc.

#### **ACCREDITATION**

This activity has been planned and implemented in accordance with the accreditation requirements and policies of the Accreditation Council for Continuing Medical Education (ACCME) through the joint providership of the University at Buffalo School of Medicine and Biomedical Sciences and CCS Oncology.

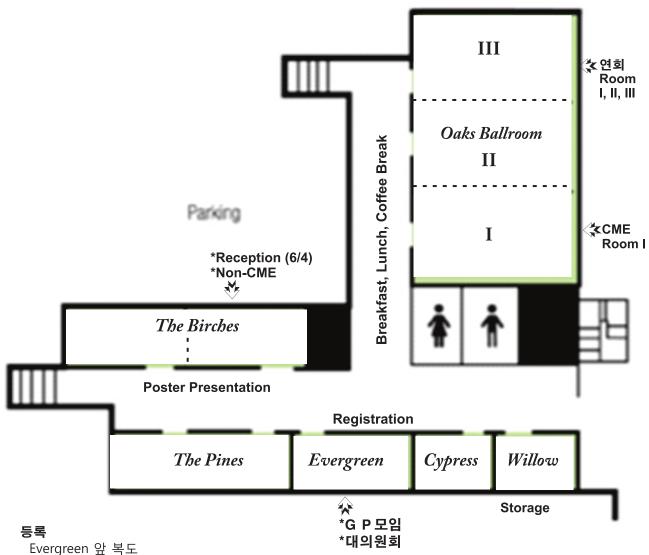
The University at Buffalo School of Medicine and Biomedical Sciences is accredited by the ACCME to provide continuing medical education for physicians.

#### **CERTIFICATION**

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ACCME Standards of Commercial Support of CME require that presentations be free of commercial bias and that any information regarding commercial products/services be based on scientific methods generally accepted by the medical community. When discussing therapeutic options, faculty are requested to use only generic names. If they use a trade name, then those of several companies should be used. If a presentation includes discussion of any unlabelled or investigational use of a commercial product, faculty are required to disclose this to the participants.

# 각 회의장과 연회장 장소와 이름



6월 2일 오후 4-6시

오전 8시-12 noon 6월 3일

오후 3시-5시30분

오전 8시-12 noon 6월 4일

오후 3시-5시30분

Chef Hors D'oeuvres (6월 2일 오후 4~6시)

#### 제2차 대의원회

Evergreen Room (6월 2일 오후 4-5시)

#### **CME**

Oaks Room (6월 3, 4일 오전 7:50 시작)

#### Non-CME

Birches Room (6월 3, 4일 오전 8시 시작)

#### **Banquet**

Oaks Ballroom (6월 3일 저녁 6-11시)

#### Reception

Birches Room (6월 4일 저녁 5시 시작)

#### **Grand Banquet**

Oaks Ballroom (6월 4일 저녁 7-11시)

#### **Green Project Meeting**

Evergreen Room (6월 3, 4일 저녁 7-10시)

#### **Breakfast Buffet**

Oaks Ballroom 앞 복도 (6월 3, 4, 5일 오전 7-9시)

#### **Lunch Buffet**

Oaks Ballroom 앞 복도 (6월 3, 4일 낮 12-오후 1시30분)

#### **Coffee Break**

Oaks Ballroom 앞 복도 (6월 3, 4일)

## FACULTY

#### Cho, Soojung, MD (2003)

Postdoctoral fellow of Pulmonary and Critical Care, Weill Cornell Medical Center, New York, NY

#### Cho, Young Min, MD, PhD (1996)

Associate Professor of Medicine, Seoul National University, College of Medicine, Seoul, Korea

#### Choi, Noah Chan H., MD (1963)

Professor of Radiation Oncology, Harvard Medical School, Boston, MA

Director, Thoracic Cancer Center, Massachusetts General Hospital

#### Hahn, Chang-Gyu, MD, PhD (1981)

Associate Professor of Psychiatry, University of Pennsylvania, Philadelphia, PA

Director, Neuropsychiatric Signaling Program

#### Hahn, Seung Shin, MD (1976)

Professor of Radiation Oncology, SUNY Upstate Medical University, Syracuse, NY

#### Hong, Jeong Youn, MD, PhD (1991)

Former Associate professor of Pediatrics, Jeju National University, School of Medicine, Jeju, Korea

#### Huh, Won Jae, MD, PhD (2002)

Fellow in Pathology, Vanderbilt University, School of Medicine, Nashville, TN

#### Jang, Sekwon, MD (2001)

Associate Professor of Medicine, Virginia Commonwealth University, Fairfax, VA

#### Jeong, Youngtae, MD, PhD (2001)

Instructor of Radiation Oncology, Stanford University School of Medicine, Palo Alto, CA

#### Kang, Daehee, MD, PhD (1987)

Professor and Dean, Seoul National University, College of Medicine, Seoul, Korea

#### Kang, Hyunseok, MD, MS (2000)

Medical Director, Counsyl, Inc

#### Kang, Min-Jong, MD, PhD, MPH (1991)

Assistant Professor of Medicine, Yale School of Medicine, New Haven, CT

#### Kang, Yoogoo, MD (1971)

Professor of Anesthesiology, Thomas Jefferson University, Philadelphia, PA

Director, Hepatic Transplantation Anesthesiology

#### Kim, Damian Byungsuk, MD (1959)

Associate Clinical Professor, St. George University

Director, OPD of Psychiatry at Coney Island Hospital, Brooklyn, NY

#### Lah, James Joonha, MD, PhD

Associate Professor of Neurology, Emory University, School of Medicine, Atlanta, GA

Director of Cognitive Neurology, Vice Chair of Neurology

#### Lee, Hong Kyu, MD, PhD (1968)

Bumsuk Professor of Medicine, Eulji University, Seoul Korea

#### Lee, Seon Kyu, MD, PhD (1989)

Associate Professor of Radiology, University of Chicago, Chicago, IL

Director, Neurointerventional Radiology

#### Lee, Sunhee, MD (1981)

Professor of Pathology, Albert Einstein College of Medicine, New York, NY

#### Moon, Dai Ok, MD (1973)

Orthopedic Surgeon, St. Francis Hospital, Wilmington, DL

#### Nam, Myong Ho, MD (1981)

Medical Director, Clinical Lab Services, Inova Fairfax Hospital, Fairfax, VA.

#### Nam, Young-Jae, MD, PhD (1994)

Assistant Professor of Medicine,

Vanderbilt University, School of Medicine, Nashville, TN.

#### Oh-Park, Mooveon, MD (1989)

Associate Professor of Physical Medicine and Rehabilitation, Rutgers New Jersey Medical School, Newark, NJ.

#### Park, Chong Chul, MD (1999)

Fellow of GU Oncology, Johns Hopkins University, School of Medicine, Baltimore, MD.

#### Park, Eunkyung, MD, PhD (2000)

Former Associate Research Scientist, Yale University PET Center, New Haven, CT.

#### Shin, James, MD, MSC

Clinical Assistant Instructor of Radiology, SUNY Stony Brook Hospital, New York, NY.

#### Shin, Kyu Ho, MD (1968)

Former Professor and Chairman of Radiation Oncology, SUNY at Buffalo, Buffalo, NY

#### Sinn, Dongin, MD (2002)

Fellow in Neurology, Beth Israel Deaconess Medical Center, Boston, MA

#### Song, Kyungmin, MD, MPH, MBA (2009)

Senior Manager, Avalere Health, Washington DC.

#### POSTERS

#### Kim, Daniel, Advisor to the Mayor of Boston

The long term results of intracranial AVM treated by Proton Stereotactic Radiosurgery

#### Hahn, Chang-gyu(81), Associate Professor of Psychiatry

Dysregulation of Stress Signaling and Synaptic Proteome in depression

#### Nam, Young-Jae(94), Assistant Professor of Medicine

Reprogramming Specific Cardiac Cell Fates: New Paradigm for Heart Repair

#### Park, Jong Chul(99), Fellow of GU Oncology

A randomized phase II study of Sipuleucel-T with or without Radium 223 in men with asymptomatic or minimally sym-ptomatic bone metastatic castrate-resistant prostate cancer

#### Kang, Hyunseok(00), Medical Director

An NGS-based carrier screen for Congenital Adrenal Hyperplasia with 95% detection rate

#### Jang, Sekwon (01), Associate Professor of Medicine

Cardiovascular toxicity following anti-angiogenic therapy in persons over age 65 with advanced renal cell carcinoma

#### Shin, Jung-Im(00), Ph.D Candidate

Pre-transplant HbA1c predicts Post-transplant Diabetes Mellitus among Kidney Transplant Recipients

#### Song, Kyungmin(09), Senior manager

Quality Measures that Focus on Patient and Family Engagement in Oncology

#### Kim, Yuhree(11)

Curative Surgical Resection of Adrenocortical Carcinoma

# SCIENTIFIC SESSION (Category 1 CME)

# Theme: New Horizons in Medicine

# **JUNE 3, 2016 (Friday)**

00112 0, 2010	(i riday)
7:50~7:55 7:55~8:00	Welcome address President Opening remarks Science Chair
8:00~8:30	Moderator Kang, Yoogoo(71) Mitochondrial Dysfunction by accumulation of organic pollutant is the cause of Diabetes Lee, Hong Kyu, M.D.(68)
8:30~9:00	Advanced imaging and current Neurovascular Management for Ischemic Stroke Lee, Seon-Kyu, M.D.(89)
9:00~9:40	Play smart with smart phone: Neurosis Revisited Kim, Byungsuk, M.D.(59)
9:40~10:10	Personalized Radiotherapy via Metabolic Response Biomarker (MRB) of 18F-FDG PET in Lung Cancer: A Phase II Validation Trial Choi, Noah Chan H, M.D.(63)
10:10~10:25	Coffee break
	Moderator Choi, Noah Chan H(63)
10:25~10:45	General Introduction for Personalized Medicine Nam, Myongho, M.D.(81)
10:45~11:05	Current and future application in Oncologic Disorders I Jang, Sekwon, M.D.(01)
11:05~11:25	Current and future application in Oncologic Disorders II Park, Jong Chul, M.D.(99)
11:25~11:45	Liquid Biopsy Kang, Hyunseok, M.D.(00)
11:45~12:05	Health Care Policy Issues Song, Kyungmin, M.D.(09)
12:05~12:30	Panel Discussion - Cases #1, 2, 3.
12:30~1:30	Lunch Break
I:30~1:50	Moderator Kang, Min-Jong(91) Mitochondrial Regulation of Inflammasome Activation in Chronic Obstructive Pulmonary Disease Kang, Min-Jong, M.D.(91)
1:50~2:10	Quick review of Zika virus diseases Hong, Jeong Youn, M.D.(91)
2:10~2:30	Development of personalized targeted strategies for lung squamous cell carcinoma
2:30~3:00	Jeong, Youngtae, M.D.(01) Recent Advancements in Radiation Oncology
	Hahn, Seung Shin, M.D.(76)
3:00~3:15	Coffee break

# SCIENTIFIC SESSION (Category 1 CME)

3:15~3:45	Moderator Lee, Sunhee(81) Test-Retest reproducibility of the metabotropic glutamate receptor 5 Ligand (18F)FPEB with bolus plus constant infusion in Humans
3:45~4:15	Park, Eunkyung, M.D.(00) 3D Printing:New Horizons in Medical Imaging and Intervention Shin, James, M.D.
4:15~4:45	Golfing and Sports Medicine: Update
4:45~5:15	Moon, Dai Ok, M.D.(73) Review of accepted academic posters Hahn, Seung Shin, M.D.(76) Review of accepted academic posters Hahn, Chang-Gyu, M.D.(81)
5:15~5:30	Announcement/Poster
JUNE 4, 2016	3 (Saturday)
7:55~8:00	Announcement Science Co-Chair
8:05~8:30 8:30~9:00 9:00~9:30	Moderator Lee, Seon-Kyu(83) Personalized Preventive Care for Cancer Kang, Daehee, M.D. (87) <i>Dean</i> Progress in Treatment and Prevention of Alzheimer's Disease Lah, James, M.D. Treatment of Orthostatic Hypotension Sinn, Dongin, M.D.(02)
9:30~10:00 10:00~10:15	New Horizons in Medicine-Personalized Medicine for Type II Diabetes Cho, Young Min, M.D.(96) Coffee break
10.00 - 10.13	Moderator Nam, Young-Jae(94)
10:15~10:45	GLUT1-dependent Glycolysis Regulates Age-related Lung Fibrinogenesis Cho, Soo Jung, M.D.(03)
10:45~11:15	Crosstalk of EGFR and Notch Signaling Pathway in Menetrier's Disease Huh, Won Jae, M.D.(02)
11:15~11:45	The interplay between mobility, cognition, and emotion in Aging Oh, Mooyeon, M.D.(89)
11:45~12:00	Poster Award (3)  President, Scientific Committee Chair, GP Chair  Closing remarks/Poster

# NON-CME SESSION

#### **JUNE 3, 2016 (Friday)**

7:00~9:00	Breakfast Mode	rator Mrs. Byoung Seun Cho
8:00~8:05	서윤석(68)	소개 및 회장인사
8:00~8:45	이규양	Smartphone Overview
8:45~9:25	이건일(68)	Basics for Wine
9:25~10:05	정양수(66)	한시 감상
10:05~10:20	Coffee Break	
10:20~12:00	Ms. Catherine Pa	nrk 거울을 보는 이유
12:00~1:00	Lunch	
1:00~1:50	김명원(68)	나의 다빈치 코드 풀이
1:50~2:40	임낙중(59)	기독교와 불교의 비교
2:40~3:20	강창욱(61)	상식으로 알아 두어야 할 정신질환 약품의 역사와
		치료의 현실문제
3:20~4:00	황보 한	Korea Space Program

#### JUNE 4, 2016 (Saturday)

7:00~9:00	Breakfast	
8:05~9:05	Ms. 이소영	Estate Planning: Goals & Tools
9:05~9:50	최도빈	철학의 눈으로 본 현대 예술
9:50~10:05	Coffee break	
10:05~10:50	이명희(66)	장수과학
10:50~12:00	온기철(71)	중국 근. 혀대사 (아퍼전쟁 - Korean War)

#### **Non CME Faculty**

#### 황보 한 박사

서울대학교 공과대학 화공학 학사 / University of connecticut 기계공학박사 / 1st President of Korea Aerospace Research Institute / 무궁화 위성 1, 2, 3,호의 성공적인 공로로 미국 항공우주학회 2001 Von Baraun Space program Management Award 수상 / 현재 Space Technology Group 사장

#### Ms. 이소영

Family & Estate Planning Lawyer in Lee & Meier, PLLC, Fairfax, VA / B.A in Journalism & M.A. in Communication from Ewha Womens University / Juris Doctor from Geoegetown University

#### Ms. Catherine Park

Le Mirage Total Hair Salon 원장(Hair, Skincare & Makeup) Annandale, VA / 숙명여대 대학원 미용 최고 경영자 과정 2기생 / 포토맥(미국) 미용 아카데미 졸업, 일본 야마노 미용대학 졸업 / 프랑스 미셀 드마스 Makeup College / 다년간 Miss Washington Hair & Makeup 지정 업소 & 심사위원

#### 최도빈 박사

서울대학교 인문대학 미학과 학부와 대학원 졸업 / 버팔로 뉴욕주립대학 철학박사 / 현재 철학 강의 Towson University, Baltimore

#### 이규양

서울대학교 문리과 대학, 천문학 / University of Hawaii에서 Computer Science 전공

Non-CME Co-chairs Mrs. Jin Soo Kim(66), Mrs. Byoung Seun Cho (71)

# Mitochondrial dysfunction by the accumulation of persistent organic pollutants in body is the cause of metabolic syndrome/diabetes mellitus; recent progress

#### Hong Kyu Lee, MD, PhD

Bumsuk professor of Medicine, Eulji University and Professor emeritus, Seoul National University

In the last 15 years, there has been increasing interest in the potential role of environmental chemicals in the diabetes epidemic. This interest has arisen for three reasons: 1) the large increase in obesity and diabetes prevalence over the last two decades remains unexplained. Although increased caloric intake and reduced physical activity are regarded as major causes, they could not explain, for examples, the increase in obesity prevalence among 6-month old babies; 2) the escalation of obesity and diabetes prevalence over the past few decades parallels the increase in the concentrations of persistent organic pollutants (POPs) in the food chain; 3) there are clear mechanistic data in animals and humans linking POPs, which are widely dispersed in the environment, bioaccumulate in human bodies through food chain and ultimately exert toxic effects, to the pathways that influence carbohydrate and energy metabolism. In support of these ideas, WHO and the U.S. National Institute of Environmental Health Sciences have voiced concerns that environmental hormone disrupting chemicals such as POPs may be contributing to the increasing trends in diabetes prevalence, and have called for appropriate epidemiological studies to be conducted.

Previously we have reported that serum level of arylhydrocarbon receptor (AhR) binding ligands is increased in subjects with diabetes mellitus with a cell-based AhR ligand assay. In this cohort, we also noted diabetic sera have higher mitochondrial function inhibitor activity (MIA) by measuring intracellular adenosine triphosphate concentration after treating the cultured myoblast with sera (Park WH et al. Biofactors, 2013).

Recently we found the serum AHR binding and MIA were higher in subjects who would develop impaired glucose tolerance or DM within 4 years than who maintained normal glucose tolerance using sera of Korean Genome and Epidemiologic Study (KoGES) cohort. Furthermore the key phenotypes determining metabolic syndrome are quantitatively correlated with AHR binding and MIA. As these two values showed highly significant statistical correlations with serum levels of persistent organic pollutants (POPs), these results led us to conclude the exposure to POPs and accumulation of them is an important causative factor for glucose intolerance and metabolic syndrome and they might act by inhibiting mitochondrial function. And relative risks of AhR binding activity and MIA were very high in predicting DM. We have confirmed these findings in a collaborative study with Drs. Lind at Uppsala University, who supplied sera and data obtained from prestigious PIVUS study.

To expand these observations we have established international collaboration and assembled a set of population-based studies from developed and developing countries with available samples, including the Brazilian Longitudinal Study of Adult Health (ELSA-Brasil), a cohort study of 15,105 Brazilian public servants (with Dr. Duncan BB) and AusDiab, an Australian initiative on diabetes (with Dr. Magliano D). These investigations at population-level will be the first systematic approach, globally, to address this issue, and will provide robust evidence to support the hypothesis that exposure to POPs is a major independent risk factor for diabetes and metabolic syndrome.

# Advanced imaging and Current Neurovascular Management for Ischemic Stroke

#### Seon-Kyu Lee, MD, PhD

Director, Neurointerventional Radiology, Department of Radiology University of Chicago, Chicago, IL

Ischemic stroke is a growing global epidemic. It is the highest ranking cause of adult disability worldwide, 4th leading cause of death in US and more than 700,000 new or recurrent strokes in the US occur each year.

In 1995, NINDS (National Institute of Neurological Disorders and Stroke) trial led to the approval of intravenous recombinant tissue type plasminogen activator (rtPA: clot buster) for acute ischemic stroke patients. Although the benefits of intravenous rtPA has been proven since then, the role of intravenous rtPA in worse strokes such as large artery occlusions has been questioned, thus necessitating the integration of intra-arterial (endovascular) stroke treatment into the clinical acute stroke management armamentarium. However, many randomized clinical trials until 2012 failed to show benefits of endovascular treatment over intravenous rtPA due to many potential issues including patient selection and device-related issues. From late 2014 to early 2015, four clinical trials have demonstrated the efficacy of endovascular treatment and have significantly changed clinical management strategies for acute ischemic stroke.

This presentation will briefly review up-to-date knowledge based on randomized clinical trials and will discuss recent development of advanced imaging techniques including 3D CT angiography, MR angiography, and perfusion imaging which allow more sophisticated patients selection for appropriate acute ischemic stroke managements. In addition, this presentation will demonstrate the state of the art endovascular techniques and devices for acute ischemic stroke management.

#### Learning objectives:

- 1. Learn current evidence based knowledge on acute ischemic stroke management strategy
- 2. Learn the role of advanced imaging techniques for acute ischemic stroke patient evaluation
- 3. Learn the state of the art Neurointerventional techniques for acute ischemic stroke treatment

#### Play smart with smart phone: Neurosis Revisited

#### Damian Byungsuk Kim, MD

Associate Clinical Professor of Psychiatry, St. George University

#### Objectives:

- 1. Understand the personal and social impact of the advancement of digital system and Social Network System.
- 2. Revisit and understand the concept of neurosis and character neurosis, and the historical background.
- 3. Proposed remedial approaches for medical especially mental health workers to deal with problems stemming from these phenomena.

Disclosure: No conflict of interest to disclose.

#### Abstract.

There was online news last year that American Psychiatric Association added a new diagnosis named "Selfitis" to its manual. According to this news, compulsive use of 'Selfie' may lead to a mental disorder. Although this news turned out to be a hoax, it was an exciting story to stimulate my thoughts. Professionals have been warning excessive use of social media system will lead many to become narcissistic or neurotic persons.

The word, 'neurosis' and 'neurotic' were fad words in the past used by professionals and non-professionals. In 1980, The American Psychiatric Association removed this entity from the psychiatric diagnostic manual. But the repercussion of this action has been enormous and many patients with emotional problems have not been getting proper treatment and perpetuating their suffering. The reason is that there are two categories of mental problems in psychiatry; one biologically determined and the other psychologically determined for which treatment approaches may differ.

This action did not mean 'neuroses' became extinct; to the contrary, people afflicted with neurosis have been increasing. One of the major contributing factors for this increase is the advancement of digital system, computers, cell phones, ipads, and the social network system like Facebook, Twitter, Linked-in, etc. These systems deprived people of looking at their mind to review and make corrections but tap on their narcissistic needs and gratify them and turn these people into "character neurosis" cases. Since neurosis is within socially acceptable boundaries, this problem is rapidly spreading without being contained by professionals. As a result, this not only becomes an individual problem but is creating huge social problems as well.

In this presentation, I will highlight these phenomena, shed light on why modern day digital generation youths are so difficult to deal with, and propose some remedial approach.

# Personalized Radiotherapy via Metabolic Response Biomarker (MRB) of 18F-FDG PET in Lung Cancer: A Phase II Validation Trial

#### Noah Chan H. Choi, MD

Professor of Radiation Oncology, Harvard Medical School

Enhanced glucose metabolism is a hallmark of malignant cellular transformation. Therefore, cessation of glucose metabolism by tumor cells after radiotherapy (RT) or chemoradiotherapy (CRT) is a biomarker representing a cell's inability to continue its vital function, i.e., glycolysis.

In searching for a lowest possible level of residual glucose metabolic function that is compatible with only metabolically alive but biologically dead (unable to divide) tumor cells admixed with stromal cells, we conducted a prospective clinical study (Partners Protocol 03-282) in which the association between the levels of residual glucose metabolic rate (MRglc) representing the maximum metabolic response (MRglc-MMR) 10 days after RT or CRT and tumor control probability (TCP) at 12 months and beyond was measured by fitting the logistic model of TCP as a function of the logarithm of MRglc to the collected tumor control data.

Such a metabolic response biomarker measured with 18F-FDG PET may help develop a novel strategy, individualized RT by offering supplementary dose of radiation for patients with a high risk of residual cancer after the standard dose of RT or CRT.

Specific aims of this study were:

- (1) Elucidate the time-course of metabolic response, measured with 18F-FDG PET, to RT or CRT and determine the earliest time point where the nadir of 18F-FDG uptake representing the maximum metabolic response (MRglc-MMR) is attainable.
- (2) Determine association between the nadir value of residual 18F-FDG uptake (18F-FDG-MMR) after RT or CRT and subsequent complete tumor control at 12 months and beyond.
- (3) Determine the values of 18F-FDG-MMR that correspond to tumor control probability (TCP) of  $\geq$ 95%, 90%, 75% and 50% at 12 months.
- (4) Determine the optimum cutoff value of 18F-FDG-MMR based on its predicted TCP, sensitivity (probability of having residual cancer) and specificity (probability of having no residual cancer).

Seminal findings of this research will be presented and an outline of the next step "Personalized Radiotherapy via Metabolic Response Biomarker (MRB) of 18F-FDG PET in Lung Cancer: A Phase II Validation Trial" will be presented.

This research was supported by NIH/NIBIB grant R01 EB002907.

#### **Personalized Medicine:**

#### Panel Presentation

Moderator: Noah Chan H. Choi, MD Radiation Oncology, Harvard Medical School

#### Panelists:

#### **Introduction to "Personalized Medicine"**

Myong Ho (Lucy) Nam, MD Inova Fairfax Hospital, Virginia

#### **Application of "Personalized Medicine" to Oncology:**

Part I: Lung, Colon and Melanoma

Sekwon Jang, MD Inova Dwight & Martha Shar Cancer Center

#### Part II: Immunotherapy in Genitourinary cancers

Jongchul Park, MD Johns Hopkins University Sidney Kimmel Comprehensive Cancer Center

#### Liquid Biopsy: Applications of circulating tumor DNA

Hyunseok Kang, MD, MS Counsyl, Inc., San Francisco, California

#### Personalized Medicine - Challenges from the Health Policy Perspective

Kyungmin Song, MD, MPH, MBA, Avalere Health (An Inovalon Company), Washington, DC

Panel Discussion for Case Studies & Q&A

Moderator: Noah Chan H. Choi, MD Radiation Oncology

Harvard Medical School



I am Professor of Radiation Oncology at Harvard medical School and Department of Radiation oncology at Massachusetts General Hospital. I have the expertise in treating lung cancer patient. Our team offers radiation therapy using most advanced technology to patients with medically inoperable stage I and II, and stage III NSCLC, limited stage SCLC, esophageal cancer, mesothelioma, and thymoma in a setting of multimodality therapy. I also serve as Director of Radiation Oncology at Thoracic Cancer Center, Massachusetts General Hospital Cancer

Center and participate in multidisciplinary clinic, case conference and meetings for research and development. I am a member in Thoracic Oncology Program Steering Committee, Partners Thoracic Oncology Program (MGH, BWH, Dana-Farber Cancer Institute), and Dana-Farber/Harvard Cancer Center Lung Program Governance Committee.

I teach residents in radiation oncology, fellows in thoracic surgery and medical oncology, and medical students who take elective in radiation oncology. I had an honor of receiving Teacher of the Year Award from National Association of Residents in Radiation Oncology in 2006.

## Myong Ho (Lucy) Nam, MD

Medical Director Clinical Laboratory Services Inova Fairfax Medical Campus, Inova Laboratories, Inova ECC laboratories



Dr. Nam is the Medical Director of the Clinical Laboratory Services and School of Medical Technology at the Inova Fairfax Hospital and Inova Laboratory, a Reference Laboratory for Inova Health System as well as Inova Emergency Care Center Laboratories in Virginia since 2004.

She has 27-years of experience in pathology practice in both Anatomic and Clinical Pathology and holds subspecialty boards in Hematopathology and Transfusion Medicine. Prior to joining Inova Healthcare System, she practiced at the Washington Hospital Center, flagship hospital for the MedStar Healthcare Corporation in Washington DC for 17 years.

She is a Cum Laude graduate of Seoul National University College of Medicine. She has received AFIP's prestigious Calendar-Binford fellowship. She was elected as the President of the Washington Society of Pathologists for 1994-1995. She also served as a member of the CAP DIRC committee for 2000-2005.

# Introduction to "Personalized Medicine"; Hype, Myth or 21st century's Medical Practice?

Modern medicine is in the middle of next revolution due to emerging scientific advances that apply genetic and molecular tools to tailor an individual patient's care.

This medical breakthrough of the century results from exploding knowledge of the human genome and lightening-speed of advances in information technology.

Many issues have to be resolved for the "Personalized Medicine" approaches to be successfully implemented in the routine healthcare: Payers, Test Manufacturers, Education of healthcare providers, Investment community, New payment models, Policy, Population Health Research, etc.

Significant changes and progresses have already been made:

I will provide comparison table to show the progress from 2006, 2011 and 2015 in the areas of pharmacogenomics, reduced cost of testing, EMR implementation rate, companion diagnostics, growth in investment and PMC membership growth.

#### Sekwon Jang, MD

Hematology Oncology

Director, Melanoma and Cutaneous Oncology Therapeutics and Research Inova Dwight and Martha Schar Cancer Institute, Fairfax, VA Associate Professor of Medicine, Virginia Commonwealth University School of Medicine



Dr. Sekwon Jang is a specialty care physician board certified in internal medicine, hematology, and medical oncology. He has a special interest in the management of melanoma, cutaneous lymphoma and other advanced skin cancers. He completed his internal medicine residency at Albert Einstein Medical Center in Philadelphia followed by hematology oncology fellowship at University of Minnesota. He was an Assistant Professor of Medicine at Georgetown University and C-Chair of Melanoma Research Group at MedStar Georgetown Cancer Network prior to

joining Inova in 2014 as a director of melanoma and cutaneous oncology therapeutics and research.

Dr.Jang's major research interests are cancer immunotherapy, treatment of melanoma and other advanced skin cancers, cancer outcome research, and quality improvement. He has received Merit Awards from ASCO for his research and is actively involved in clinical trials including immune-checkpoint inhibitors for advanced melanoma and adjuvant vaccine study in melanoma.

# Personalized cancer therapy for patients with lung cancer, colorectal cancer, and melanoma

Personalized cancer therapy is a treatment strategy based on the ability to predict which patients are more likely to respond to specific cancer therapies. This approach is founded upon the idea that tumor biomarkers are associated with patient prognosis and tumor response to therapy. Individual patient's tumor molecular profiles, tumor disease site and other patient characteristics are then used for determining optimal therapy.

Tumor biomarkers can be DNA, RNA, protein and metabolomics profiles that predict treatment response. Most advanced approach is the sequencing of tumor DNA which can reveal genomic alterations such as EGFR mutation and ALK gene rearrangement in lung cancer and BRAF mutation in melanoma. Targeted therapies for these mutations have shown significant improvement in survival compared to chemotherapy. Also lung cancer, colorectal cancer, and melanoma often express immune checkpoint protein called PDL1 which inhibits the cytotoxic function of tumor infiltrating lymphocytes. Recently developed monoclonal antibody to PD1 can negate the inhibitory function of PDL1 leading to tumor regression, and improvement in survival.

## **Genitourinary Cancers**

#### Jong Chul Park, MD

I am a clinical fellow in Genitourinary Oncology at Johns Hopkins Sidney Kimmel Comprehensive Cancer Center. I have completed my Hematology and Oncology Fellowship at the Lombardi Comprehensive Cancer Center at Georgetown University. My main research interest is in cancer immunology and immunotherapy focused on genitourinary cancers.

I am currently involved in several immunotherapy clinical trials including phase II study of radium-223 and sipuleucel-T in prostate cancer, phase II dual checkpoint inhibition in muscle invasive bladder carcinoma, a phase II NK cell and T cell combined immunotherapy, and a pilot immune pharmacodynamic study of PD-1 inhibition in renal cell and urothelial carcinoma.

# Immunotherapy in Genitourinary Cancers: beyond checkpoint inhibitors

In the past decade, we have seen a tremendous advance in our understanding of biology owing to the rapid advance in molecular diagnostic techniques and the dedication of physician-scientists. Among these advances, the most exciting is the improved understanding of cancer immunology and the development of novel immunotherapeutics.

Among various recent immunotherapeutic approaches in cancer, immune checkpoint inhibition has been most successful. Despite early promising durable antitumor activities and overall favorable toxicity profiles by these agents, low response rate and the lack of reliable predictive markers is the main issue to be resolved for their optimal use in the clinic.

It is of paramount importance that the future trials should incorporate carefully designed correlative biomarker evaluation in an attempt to identify the subgroup that are likely to benefit. Combinational approach with other immune therapeutics with non-overlapping and complementary mechanisms of action is another approach to overcome sub optimal response rate of current agents. I will discuss some of the novel clinical trial concepts focused on the genitourinary cancers in the context of current data and limitations.

#### Hyunseok Peter Kang, MD, MS

Medical Director Counsyl, Inc. South San Francisco, CA 94080

Dr. Kang is the Medical Director at Counsyl, Inc., a leading genomic testing company that has been selected as one of the 50 Smartest Companies by MIT Technology Review, and one of the most innovative startups of 2015 by Inc. Magazine.

He completed his residency training in laboratory medicine at Washington University in St. Louis, and a fellowship in molecular genetic pathology at the University of Pittsburgh, then went on to a position as Assistant Director of molecular diagnostics at Roswell Park Cancer Institute.

Prior to joining Counsyl, he received a MS in Biomedical Informatics from Stanford University.

## Liquid Biopsy: Applications of circulating tumor DNA

Circulating tumor DNA (ctDNA) has recently gained much interest as a noninvasive method of sampling tumor tissue, a so-called "liquid biopsy".

There are many challenges that must be overcome when testing ctDNA, related to the low abundance of cell-free DNA in the plasma and the even smaller fraction occupied by ctDNA, in addition to the inherent limitations of sequencing technology.

Various methods utilizing molecular biology tweaks and computational algorithms that have been developed to address these challenges.

I will discuss several exciting potential applications of ctDNA, including tumor profiling for personalized therapies, treatment monitoring, detection of minimal residual disease, and early detection of cancers.

#### Kyung Min Song, MD, MPH, MBA

Senior Manager, Evidence Translation & Implementation Practice Avalere Health (An Inovalon Company)



Dr. Kyung Min (Minnie) Song is Senior Manager, Evidence Translation & Implementation practice at Avalere Health, a health policy advisory and business strategy firm based in Washington, D.C. She advises a variety of healthcare stakeholders on generation and implementation of evidence-based strategies for evaluating quality of care and linking it to payment and value creation. She applies her background in life science, public health and business to lead various projects. Minnie also brings expertise in clinical medicine, outcomes research and

global health with a focus on infectious diseases and vaccine development.

Prior to joining Avalere, Minnie worked as a Project Manager in Global Health Outcomes at Merck & Co. managing observational studies and utilizing cost-effectiveness models to support product launches. Additionally, she has provided research support to International Vaccine Access Center in the Johns Hopkins Bloomberg School of Public Health. Minnie also has served as a Medical Officer in Korea's Centers for Disease Control & Prevention, revising and implementing new national immunization standards and developing vaccination action plans related to disease outbreaks.

Minnie has a MPH and a MBA from the Johns Hopkins University and a MD from the Seoul National University College of Medicine, Seoul, South Korea.

#### Personalized Medicine - Challenges from the Health Policy Perspective

Personalized medicine, also referred to as precision medicine, challenges the traditional notion of medicine which has been developed in a way that physicians treat patients according to their diagnoses made mostly based on patients' signs and symptoms. Medical community has been striving for standardizing how to diagnose and treat certain patients who share similar symptoms and signs.

However, with scientific and technological advances especially in the field of genetics, the idea of using a patient's biological and genetic information to improve and tailor treatment has emerged. Personalized medicine, in theory, can lead to reducing inefficiencies and side effects of treating patients with therapeutic agents that do not work. Large investments have been made to realize this idealism, as evidenced by the President's \$215 million Precision Medicine Initiative.

However, for personalized medicine to become the mainstay of how physicians treat individual patients, there are a number of issues to be considered and addressed. In the presentation, I would like to highlight some of the imminent issues, related to 1) trial design and effective drug approval, 2) reimbursement, and 3) readiness of healthcare personnel and the public.

## Panel Discussion and Q&A

#### Case I:

56 yo Korean female, non-smoker. Presenting Symptom: SOB, cough and right chest pain. Diagnosis: Adenocarcinoma of Right Lower Lobe, stage IV

#### Case II:

78 yo white male with prior history of early stage melanoma presented with generalized darkening of skin found to have recurrent metastatic melanoma.

#### Case III:

65 yo black male with history of high-grade urinary bladder cancer with negative cystoscopy and cytology

#### Case IV:

70 yo white male with metastatic prostate cancer in consideration for AR therapy. Blood specimen was sent for AR-V7 test.

Q&A