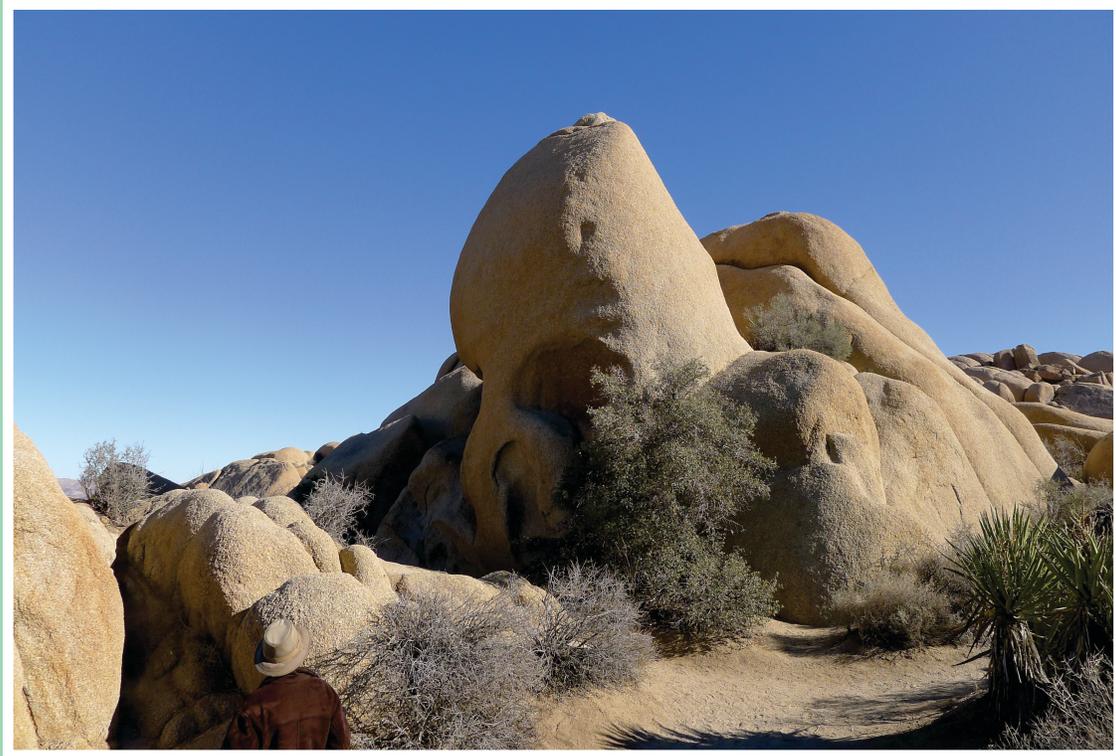


**SNUCMAA of NA** *34*  
**Annual Convention and Scientific Meeting  
Program and Abstracts**



**March 1 (Wed) ~ March 5 (Sun), 2017**

**Pacific Palms Resort**  
City of Industry, California, 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



34차 콘벤션 준비에 힘쓰신 모든분들께 심심한 감사를 드립니다.  
특히 학술대회 준비에 많은 애를 쓰신 이현령(68) chair, 제일 많이 수고 하신 한승신(76) co-chair, CME Credit을 따오느라고 수고 하신 신규호(68) co-chair, 정영태(01) associate chair, 모두 수고를 많이 하셨습니다.  
Non CME program 짜고 연사들 물색 하고 교섭 하시느라고 수고 하신 김명원(68) Chair 감사 드립니다.

서울에서 먼길 마다 앓고 찾아 주시는 홍정용 서울의대 동창 회장님, 강대희 학장님, 박중신 부학장님, 권준수 부학장님, 서창석 병원장님, 김용진 병원 혁신실장님, 학술대회와 non CME에서 강의를 맡으신 이흥규 교수님, 조승렬 교수님, 홍승수 교수님들을 비롯하여 서울과 미주 전역에서 참석하여 자리를 빛내주시는 동문 여러분들을 진심으로 환영 합니다.

특히 이번에 학술 대회시간을 연장 하면서까지 적극 참여를 하시는 미래세대 (Green Project)의 여러 연사들과 정영태(01) chair의 수고에 감사 드립니다. 또 우리 동문은 아니나 같은 의학 분야에서 활동 하고 있는 Timothy Carroll, Kenneth Kim, 배경태, 강지연 등 여러 선생님들의 참여에 감사 드립니다.

이번 학술 대회는 New Horizon in Medicine 특히 Imaging in Modern Medicine 이라는 주제로 열리는 만큼 이를 통하여 이 분야에서의 최신의학 정보를 습득하여 여러분들의 진료 활동에 도움이 되시기 바라며, 또한 이번 콘벤션에서 더욱 중점을 두었던 Non CME 의 주옥 같은 강연들, 특히 각계의 권위자들로 가득찬 의학 이외에 인문, 미학, 천문학, 미술, 음악, 여행, 영화 등등의 분야의 지식을 습득하여 여러분들의 지식의 깊이와 생활의 윤택함에 보탬이 될것을 굳게 믿습니다.

그러므로서 동창회의 본 목적인 우리 빛났던 젊은 날의 공통의 기억이 있는 연건동 학창 시절을 반추 하는데 끝나지 않고 더 나아가 최신의학 지식과 다른 분야의 지식도 얻으므로서 우리가 삶을 살아가는 방향 설정에 큰 도움을 받을수 있다고 믿습니다.

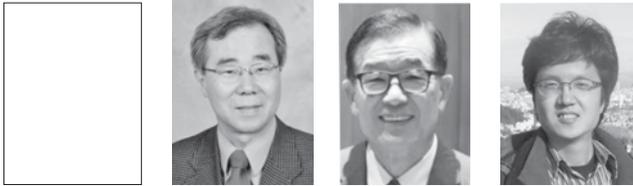
학술대회 연사님들, Non CME 외부 초청 연사이신 최도빈, 대니엘 석, Joshua Grayson, Aaron Panofsky, 홍승수, 박승균, 조승렬, 이흥규, 이종호, Mrs. 김홍서, 박평식, 박홍진, 김지영 제분들과 온기철 동문님께 진심어린 감사를 드립니다.

그리고 이 행사에 관련된 모든 출판물을 마련 하신 황창근 사장님, 이 분 없었으면 이 모든 일을 이루어 낼 수 없었을 동창회 사무실의 보배같은 존재인 Mrs. Jamie Kim, 김홍서 총무의 갑작스러운 서거로 갑자기 중책을 떠맡고 이 막중한 총무 직을 성공적으로 이끄신 김성환 (71) 부회장의 부인이신 김영애 여사님, 이 두 분의 공로에는 더 무어라 감사의 말씀을 드릴수가 없습니다. 그외 뒤에서 묵묵히 모든 잡일을 도와 주신 전 임원 부인들께 진심으로 감사 드립니다.

마지막으로 남가주 지역의 여러 동문들의 협조 없이는 이 큰일을 치루어 낼수 없었을 것입니다.  
감사 합니다.

회장 이 건 일(68)

## Message from the Scientific Committee Chairs



### Message from the Scientific Committee Chairs

Dear SNUCMA Alumni,

Welcome to the Scientific Session of the 34th Annual Convention of the SNUCMAA of North America. The theme of this year's meeting is "New Horizons in Medicine" in continuity with the last year's. Under the theme, we chose three main areas: Personalized Medicine, Imaging in Modern medicine and Regenerative Medicine/Stem Cell Research. These areas were chosen because they promise to bring major changes in medical practice in near future and at the same time, many young alumni are working in the related fields. Last year, we successfully organized a panel presentation on Personalized Medicine. This year, we gathered nine prominent panelists for the presentation of "Imaging in Modern Medicine". Dr. Joon Koo Han, Professor and Chairman of Radiology in Seoul National University College of Medicine, will serve as the moderator. Two prominent non-alumni panelists Dr. Kyongtae Bae (University of Pittsburg) and Dr. Timothy Carroll (University of Chicago) will speak on the use of artificial intelligence in the interpretation of imaging, and on the new developments in MRI, respectively. A separate small panel discussion on "Changing Health Care Environment" will be moderated by Dr. Myongho Nam. The panel is meant to guide our young alumni how to be successful in the rapidly changing Health Care Environment. There will be two key note speakers, Dr. Kenneth Kim ("Latest trends in Accelerating Drug Development") and Dr. Seung Yull Cho ("Current Status of Medical Research in Korea") and they promise to be the highlights of the meeting. In addition to these themed sessions, there will be presentations on diverse subjects by junior and senior alums on Diabetes, Lung Cancer, Breast Cancer, Vision Disability, Stem Cell Transplantation for Autoimmune disease, Tests for Autonomic Nervous System, Stress and PFC Dysfunction, Asian Modernities Imagined in Ethiopia, and Health Care Disparity in Korean Americans.

We would like to express our sincere appreciation to all speakers, moderators, scientific committee members and administrators. In particular, Dr. Seon Kyu Lee played a major role by suggesting topics for the panels and assembling profiles for the panelists. Drs. Sunhee Lee and Chang-Gyu Hahn provided assistance with editing and proofreading of the final Syllabus. Administratively, we had a great support from the President (Dr. Kun Il Lee), the treasurer (Dr. Myong Won Kim), the Convention Chairs (Dr. Byong In Yoon, Dr. Peter Hun-Ryung Lee), the Scientific Committee Co-Chair (Dr. Kyu Ho Shin) who took care of CME credits for the meeting, and Jamie Kim who assembled all the meeting information and assured the announcements and the final prints of the program are without errors.

It has been our great pleasure to work with so many talented alumni to make this program successful. We hope you enjoy the Scientific Meeting and the Convention.

Sincerely,

**Peter Hun-Ryung Lee, MD**

Chair, Scientific Committee

**Kyu Ho Shin, MD**

Co-Chair, Scientific Committee

**Seung Shin Hahn, MD**

Co-Chair, Scientific Committee

**Youngtae Jeong, MD, PhD**

Associate Chair, Scientific Committee

## GENERAL PROGRAM

### March 1, 2017( Wednesday)

7:30am Bus departure to OakQuarry course from Pacific Palm Resort  
10:00am Tee time, OakQuarry Course (친선골프)

### March 2, 2017(Thursday)

8:00am Tee time, Ike Course (golf tournament)  
3:00pm-5:30pm Registration: outside of Cherry Hill  
4:30pm-5:30pm BOD Meeting, Cherry Hill room  
6:00pm-9:00pm Class Reunion (각 동기별 한국식당)

### March 3, 2017(Friday)

7:00am-9:00am Continental Breakfast, CIMA restaurant  
7:50am-12:00noon Scientific program session 1, Majestic I room  
7:50am-12:00noon Non CME program session 1, Majestic CD room  
8:00am-12:00noon Registration, Main lobby  
12:00noon-1:30pm Lunch, outside of Majestic AB room  
1:00pm-5:15pm Scientific program session 2, Majestic I room  
1:00pm-4:55pm Non CME program session 2, Majestic CD room  
3:00pm-6:00pm Registration, Main lobby  
6:00pm-10:30pm Grand Banquet, Colonial AB room

### March 4, 2017(Saturday)

7:00am-9:00am Continental Breakfast, Cima restaurant  
7:55am-12:00noon Scientific program session 3, Majestic I room  
7:55am-12:00noon Non CME program session 3, Majestic CD room  
8:00am-12:00noon Registration, Main Lobby  
11:45am-6:00pm Paul Getty Museum tour  
12:00noon-1:30pm Lunch, outside of Majestic AB room  
1:00pm-4:00pm Scientific program session 4, Cherry Hill room  
3:30pm-6:30pm Registration, Main Lobby  
6:30pm-10:30pm Banquet, Majestic AB room

### March 5, 2017(Sunday)

8:00am-8:00pm Joshua Tree All day tour (Lunch, Dinner included)

## GENERAL INFORMATION

The 34th Annual scientific symposium of the Seoul National University College of Medicine Alumni Association of North America (SNUCMAA-NA) will include two Panel discussions and 12 individual lectures. The panel discussions will be on “Imaging in Modern Medicine” and “Changing Healthcare Environment”. “Imaging in Modern Medicine” was chosen as this year’s main topic as part of the “New Horizons in Medicine” series which began last year. The scientific meeting will be held in the Majestic I Room for the entire day Friday (3/3/2017) and the morning of Saturday (3/4/2017). The Saturday afternoon session will be held in Cherry Hill Room. The presentations will begin at 7:50 AM on March 3, 2016 (Friday) and will follow the schedule according to the program printed for the Scientific Sessions (p 10-11).

**This meeting is accredited for a maximum of 14.5 AMA PRA Category 1 Credit(s)™.**

The Non-CME portion of the symposium will be held in Majestic CD Room beginning at 7:55 AM on March 3, 2017 (Friday) and will follow the schedule according to the program printed for Non-CME Session (p 12).

## 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 designate this live activity for a maximum of 14.5 AMA PRA Category 1 Credit(s)™. Physicians should claim only the credit commensurate with the extent of their participation in the activity.

To receive the due certificate, each attendee must complete two forms, the Credit Claim Form and the Evaluation Form. These Forms will be ready for pick up at the entrances of the Majestic I Room.

### Credit Claim Form:

This 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 want 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 be issued only after we submit the analysis of this information to University of Buffalo School of Medicine and Biomedical Sciences.

# 34th Medical Scientific Convention

*New Horizons in Medicine*

March 3 - 4, 2017

## 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.

<b>Bae, Kyongtae</b>	Presenter	Nothing to Report
<b>Carroll, Timothy</b>	Presenter	Nothing to Report
<b>Cho, Seung Yull</b>	Presenter	Nothing to Report
<b>Choh, Joong Haeng</b>	Presenter	Nothing to Report
<b>Choi, Taewoong</b>	Presenter	Nothing to Report
<b>Hahn, Seung Shin</b>	Moderator/Planning Committee	Nothing to Report
<b>Han, Joon Koo</b>	Presenter	Nothing to Report
<b>Han, Joon Koo</b>	Moderator	Nothing to Report
<b>Han, Joon Koo</b>	Moderator	Nothing to Report
<b>Jeong, Youngtae</b>	Presenter	Nothing to Report
<b>Jeong, Youngtae</b>	Moderator	Nothing to Report
<b>Kang, Daehee</b>	Planning Committee	Nothing to Report
<b>Kang, Hyunseok</b>	Moderator	Nothing to Report
<b>Kang, Hyunseon</b>	Presenter	Nothing to Report
<b>Kang, Ji Yun</b>	Presenter	Nothing to Report
<b>Kim, Bo-Hyun</b>	Presenter	Nothing to Report
<b>Kim, Euishin</b>	Presenter	Nothing to Report
<b>Kim, Kenneth</b>	Presenter	Nothing to Report
<b>Kwon, Jun Soo</b>	Presenter	Nothing to Report
<b>Lee Do-Eun</b>	Presenter	Speakers' Bureau for Janssen, Boehringer Ingelheim
<b>Lee, Hun Ryung</b>	Moderator	Nothing to Report
<b>Lee, Jin Soo</b>	Presenter	Grant/Research from Roche, Pfizer, AstraZeneca, Eli-Lilly
<b>Lee, Seon Kyu</b>	Presenter	Nothing to Report
<b>Nam, Myongho</b>	Presenter	Nothing to Report
<b>Nam, Myongho</b>	Moderator	Nothing to Report
<b>Park, Haeseong</b>	Presenter	Nothing to Report
<b>Park, Jeong Mi</b>	Presenter	Nothing to Report
<b>Park, Joongshin</b>	Planning Committee	Nothing to Report
<b>Park, Seung-Kyoon</b>	Presenter	Nothing to Report
<b>Park, Young Su</b>	Presenter	Nothing to Report
<b>Seo, Gwy Suk</b>	Presenter	Nothing to Report
<b>Shin, Kyu</b>	Activity Director	Nothing to Report
<b>Shin, Yong-Jun</b>	Presenter	Nothing to Report
<b>Sinn, Dongin</b>	Presenter	Nothing to Report
<b>Song, Jeehey</b>	Presenter	Nothing to Report
<b>Song, Kyungmin</b>	Presenter	Nothing to Report

**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 Jacobs School of Medicine and Biomedical Sciences and CCS Oncology.

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

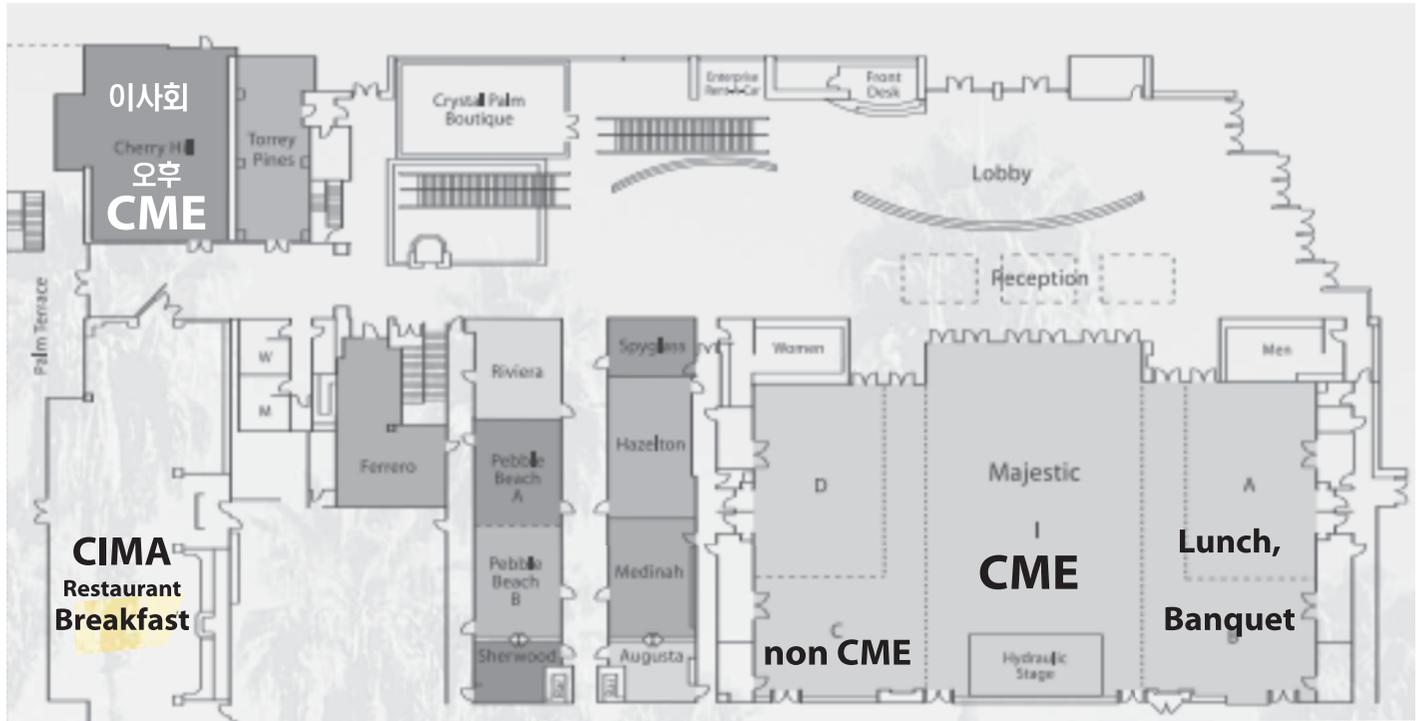
**CERTIFICATION**

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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 unlabeled or investigational use of a commercial product, faculty are required to disclose this to the participants.

# 각 회의장과 연회장 장소와 이름

## Lobby level



## Mezzanine level



## FACULTY

**Bae, Kyongtae, MD, PhD, MBA**

Professor and Associate Dean, University of Pittsburgh Medical Center, Pittsburgh, PA

**Carroll, Timothy, PhD**

Professor of Radiology, University of Chicago, Chicago, IL

**Cho, Seung Yull, MD, PhD (1968)**

Professor Emeritus of Parasitology, Sungkyungwan University, Seoul, Korea

**Choh, Joong Haeng, MD, FACS (1969)**

Medical Director, International Health Care Center, Seoul National University Bundang Hospital, Seoul Korea

**Choi, Taewoong, MD (2002)**

Postdoctoral fellow, Blood & Marrow Transplantation  
Stanford University School of Medicine, Palo Alto, CA

**Han, Joon Koo, MD, PhD (1982)**

Professor and Chairman, Department of Radiology, Seoul National University, Seoul, Korea

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

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

**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, San Francisco, CA

**Kang, Hyunseon, MD, PhD (1998)**

Assistant Professor of Radiology, University of Texas, MD Anderson Cancer Center, Houston, TX

**Kang, Ji Yun, PhD**

Senior Advisor, Leadership and Organization Development, Mayo Clinic, Rochester, MN

**Kim, Euishin, MD (1966)**

Professor of radiology, University of California, Irvine, CA

**Kim, Kenneth, MD**

CEO, WCCT Global, Cypress, CA

**Kim, Bohyun, MD, PhD (1985)**

Professor of Radiology, Mayo Clinic, Rochester, MN

**Kwon, Jun Soo, MD (1984)**

Professor of Psychiatry, Seoul National University, Seoul, Korea

**Lee, Do-Eun, MD (1999)**

Medical Director, Do-Eun Lee, M.D. Inc, Endocrinologist, San Francisco, CA

**Lee, Jin Soo, MD, PhD (1974)**

Former president, National Cancer Center, Seoul, Korea

**Lee, Hun Ryung, MD (1968)**

Chairman of Governing Board, Hollywood Presbyterian Medical Center, Los Angeles, CA  
Chairman, Department of Medicine, Pacific Alliance Medical Center, Los Angeles, CA

**Lee, Seon-Kyu, MD, PhD (1989)**

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

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

Medical Director, Inova Laboratories & IFH School of CLS, Inova Health System, Fairfax, VA

**Park, Haeseong, MD (2005)**

Assistant Professor of Internal Medicine, Washington University, St. Louis, MO

**Park, Jeong Mi, MD (1985)**

Former Professor of Radiology, University of Illinois at Chicago, Chicago, IL

**Park, Joong Shin, MD, PhD (1989)**

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

**Park, Seung-Kyoon, MD (1961)**

Professor of Psychiatry, SUNY at Buffalo, Buffalo, NY

**Park, Young Su, MD, MA (2008)**

PhD candidate, Anthropology, Stanford University, Palo Alto, CA.

**Seo, Gwy Suk, MD, PhD (1984)**

Professor of Radiology, University of Rochester, Rochester, NY

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

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

**Shin, Yong-Jun, MD, PhD (2003)**

Assistant Professor of Biomedical Engineering, University of Connecticut, Storrs, CT

**Sinn, Dongin, MD (2002)**

Clinical Assistant Professor, Stanford University School of Medicine, Palo Alto, CA

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

Former Senior Manager, Avalere Health, Washington DC

**Song, Jeehey, MD (2014)**

Research Assistant in Ophthalmology, Stanford University School of Medicine, Palo Alto, CA

## SCIENTIFIC SESSION (Category 1 CME)

### Theme: New Horizons in Medicine (Imaging in Modern Medicine)

#### March 3, 2017(Friday)

- 7:50-7:55 Lee, Kun Il(68) / Presidnet  
Welcome address
- 7:55-8:00 Opening Remarks Scientific Committee Chair
- Moderator: Lee, Hun Ryung(68)**
- 8:00-8:30 Lee, Jin Soo(74) / Medical Oncology  
New Developments in the Treatment of Lung Cancer: Beyond Targeted Therapy
- 8:30-9:00 Park, Seung-Kyoon(61) / Psychiatry  
Life Stress and PFC Dysfunction
- 9:00-9:45 Kim, Kenneth / Internal Medicine  
Latest trends in Accelerating Drug Development/Engaging the Korean American Voice
- 9:45-10:00 Coffee break
- Moderator: Han, Joon Koo(82)**
- 10:00-10:20 Han, Joon Koo(82) / Radiology  
Introduction to “Imaging in Modern Medicine”
- 10:20-10:50 Kim, Euishin(66) / Nuclear Medicine  
Advanced Nuclear and Molecular Imaging in Healthcare
- 10:50-11:20 Carroll, Timothy / Radiology  
New Developments in MRI
- 11:20-11:50 Kwon, Jun Soo(84) / Psychiatry  
The use of Brain Imaging as a Biomarker for Schizophrenia
- 11:50-12:00 Panel Discussion
- 12:00-1:00 Lunch Break
- Moderator: Han, Joon Koo(82)**
- 1:00-1:30 Seo, Gwy Suk(84) / Radiology  
Musculoskeletal Imaging in the ED-multimodality approach
- 1:30-2:00 Park, Jeong Mi(85) / Radiology  
The proper use of imaging studies for Breast Cancer
- 2:00-2:30 Kim, Bohyun(85) / Radiology  
The evolving Role of MRI for the Prostate Cancer
- 2:30-2:40 Panel Discussion
- 2:40-3:10 Kang, Hyunseon(98) / Radiology  
Beyond RECIST: Assessing Tumor Response in the Era of Molecular Medicine
- 3:10-3:40 Bae, Kyongtae / Radiology  
Radiology: Rolling Stone
- 3:40-3:50-  
3:50-4:00- Panel Discussion  
Coffee break
- Moderator: Jeong, Youngtae(01)**
- 4:00-4:30 Jeong, Youngtae(01) / Cancer research  
Stem cell 101 and their role for cancer pathogenesis and treatment
- 4:30-5:00 Park, Young Su(08) / Anthropology  
Asian Modernities Imagined in Ethiopia:  
Historicity of Korean Global Health projects in Ethiopia
- 5:00-5:15 Announcement (Introduction of New SNUCMAA website)

## SCIENTIFIC SESSION (Category 1 CME)

### March 4, 2017(Saturday)

- 7:55-8:00 Announcement Scientific Committee Co-Chair
- Moderator: Hahn, Seung Shin(76)**  
8:00-8:30 Park, Haeseong(06) / Medical Oncology  
Recent Updates on Management of HER2 Positive Breast Cancer
- 8:30-9:00 Sinn, Dongin(02) / Neurology  
Introduction to Tests for the Autonomic Nervous System
- 9:00-9:30 Choh, Joong Haeng(69) / Cardiovascular Surgery  
Health Care Disparity in Korean Americans
- 9:30-10:15 Cho, Seung Yull(68) / Parasitology  
Current Status of Medical Research in Korea
- 10:15-10:30 Coffee break
- Moderator: Kang, Hyunseok(00)**  
10:30-11:00 Song, Jeehey(14 ) / Ophthalmology  
Vision Disability and Reading Abnormalities in Neuro-Ophthalmic Diseases
- 11:00-11:30 Lee Do-Eun(99) / Internal Medicine  
Modern approach to evaluate and treat Diabetes Mellitus
- 11:30-12:00 Choi, Taewoong(02) / Hematology&Oncology  
Stem Cell Transplantation for Severe Autoimmune Disease
- 12:00-1:00 Lunch Break
- Moderator: Nam, Myongho(81)**  
1:00-1:30 Lee, Seon Kyu(89) / Interventional Radiology  
The US Medicare Payment Reform(MACRA): It's NOT just Permanent Doc-Fix!
- 1:30-2:00 Shin, Yong-Jun(03) / Biomedical Engineering  
Distributed and Adaptive Personalized Evidence-Based Medicine
- 2:00-2:30 Kang, Ji Yun / Leadership Development  
Physician Leadership Development for the Changing Healthcare Environment
- 2:30-3:00 Nam, Myongho(81) / Pathology  
Appropriate Laboratory Test Utilization: Choosing Wisely
- 3:00-3:30 Song, Kyungmin(09) / Health Care Industry  
The Future of Healthcare Delivery
- 3:30-4:00 Panel Discussion / Review of program  
Closing Remarks (Introduction of New SNUCMAA website)

## NON-CME SESSION

### March 3, 2017(Friday)

7:50am-7:55am	Mrs.김성환	Moderator
7:55am-8:00am	이건일	President Address
8:00am-8:45am	최도빈	새로운 예술을 꿈꾸는 사람들
8:45am-9:30am	대니엘 석	오케스트라 만들기
9:30am-9:45am	Coffee Break	
9:45am-10:30am	Joshua Grayson	Longing for the homeland, Chopin
10:30am-11:15am	Panofsky	When genetics challenges a racist's identity
11:15am-Noon	홍승수	지구-달 계에 얽힌 우연과 필연의 길항관계
Noon-1:00pm	Lunch	
1:00pm-1:45 PM	박승균	건망증 vs 경도인지장애 vs 치매
1:45pm-2:30pm	조승렬	뇌 고충증 이야기
2:30pm-2:45pm	Coffee Break	
2:45pm-3:30pm	이흥규	한국인의 기원
3:30pm-4:15pm	이중호	세계가 놀라는 한국사 7장면
4:15pm-4:55pm	Mrs.김홍서	Getty Center에 관한 모든 것
4:55pm	Announcement	

### March 4, 2017(Saturday)

7:55am-8:00am	Mrs.김성환	Moderator
8:00am-8:40am	박평식	Smart Aging
8:40am-9:30am	박홍진	내가 사랑하는 로맨스 영화
9:30am-9:45am	Coffee Break	
9:45am-10:30am	김지영	의사 문필가들
10:30am-11:30am	온기철	중국 근대사 Part II
	Announcement	

# 2017-SNUCMAA Panel Programs

## 1. Imaging in Modern Medicine



**Moderator: Joon Koo Han, MD, PhD**

Chairman, Department of Radiology  
Seoul National University, Seoul, Korea

Dr. Joon Koo Han is currently a Professor and the Chairman of the department of Radiology in Seoul National University College of Medicine and also a professor of Department of Surgery in Seoul National University. He graduated Seoul National University College of Medicine in 1982 with M.D. degree and received PhD degree from the same university in 1990. Dr. Han served as a chairman of board of directors in Korean Society of Ultrasound in Medicine as well as the vice president of Korean Society of Gastroenterology, and the president of Korean Society of Abdominal Radiology.

Dr. Han is an expert in the field of abdominal imaging (especially hepatobiliary and pancreatic ultrasound, CT and MRI) and non-vascular interventions, especially in biliary intervention. He has published more than 200 papers about abdominal imaging and interventions in international peer reviewed journals.

Dr. Han also has expertise in medical informatics including PACS and hospital information systems and served CIO of Seoul National University.



**Euishin Edmund Kim, MD**

Professor of Radiological Sciences  
University of California at Irvine, Irvine, CA, USA

Dr. Euishin Edmund Kim is an internationally renowned expert and pioneer of Radioimmunodetection and Radioimmunotherapy of Cancer, PET, MRI, Nuclear and Molecular Imagings. He is currently a Professor of the Department of Radiological Sciences at the University of California at Irvine. Before his move to California, he was tenured Professor of Radiology and Medicine at MD Anderson Cancer Center for 30 years. He is also currently professor of Molecular Medicine in the Graduate School of Convergence Science and Technology at Seoul National University and Eminent Professor of Oncology at Kyunghee University, Seoul, Korea. He graduated Seoul National University College of Medicine in 1966 with M.D. degree and received M.S. degree from the same university in 1968. Dr. Kim served the president of American College of Nuclear Medicine in 1994 and the president of Korean-American Medical Association in USA in 2009. Dr. Kim has published more than 350 papers in peer reviewed journals, 15 textbooks on nuclear and molecular imaging. In addition to his academic expertise, he did serve an Elder at Korean New Covenant Presbyterian Church in Houston and is one of most popular and sought after expert speakers.



**Timothy Carroll, PhD**

Professor, Department of Radiology  
University of Chicago, Chicago, IL, USA

Tim Carroll is a professor of Radiology and the director of Neuroimaging Research at the University of Chicago, IL, USA. He graduated from University of Illinois at Urbana in 1985 and received PhD in High Energy Physics at University of Illinois at Chicago in 1994. Dr. Carroll works on the evaluation and quantification of physiologic changes in the brain resulting from neurovascular disease and stroke. Dr. Carroll develops advanced Magnetic Resonance Imaging (MRI) target patient specific changes in arterial vasculature, tissue perfusion and changes in the arterial wall itself to quantify physiologic changes in patients such as Quantification of MR Cerebral Perfusion, Dynamic cerebral MR angiography, MR determination of Brain Aneurysm Rupture risks, Cerebral Oxygen Extraction measurement using MRI to name a few. As a physicist and biomedical engineer, he has been developing advanced MRI-based imaging methods for over 20 years and more than 140 publications in peer review journals. He has a long track record of effective collaboration with physicians from Radiology, Neurosurgery, Neurology, Cardiology and Preventative medicine.



**Jun Soo Kwon, MD, PhD**

Professor, Department of Psychiatry  
Seoul National University, Seoul, Korea

Dr. Kwon is a professor of neuropsychiatry at Seoul National University College of Medicine. He graduated from Seoul National University College of Medicine in 1984. After the completion of his postgraduate training at the Seoul National University Hospital, he has stayed as an attending physician since 1991. He also served the Chairman of the Department of Neuropsychiatry of Seoul National University College of Medicine from 2010 to 2016.

Dr. Kwon is an expert of neuropsychiatric disorders including schizophrenia, obsessive-compulsive disorder, and mood disorders. He is particularly interested in studying brain structure and function using neuroimaging techniques such as MRI and PET, electrophysiological measures including ERP/EEG, and neurophysiological tests to study cognitive functions. Among the most recent research topics are early-stage of various disorders like schizophrenia, which is also known as the clinical high-risk for psychosis.



**Gwy Suk Seo, MD, PhD**

Professor and Section Chief of Emergency Radiology,  
University of Rochester, Rochester, NY, USA

Gwy Suk Seo, MD, MSc, PhD, is the section chief of Emergency Radiology and a professor of Radiology at the University of Rochester, NY, USA. She graduated from Seoul National University College of Medicine in 1984 with M.D. degree and received PhD degree from Shinshu University, Matsumoto, Japan in 1997. She did fellowship trainings in Musculoskeletal Radiology at Shinshu University School of Medicine, Japan and University of Rochester, NY, USA. In addition, she did Emergency Radiology Fellowship at the University of Maryland, MD, USA. Recently, Dr. Seo received master degree in Marriage and Family Therapy at University of Rochester, Rochester, NY.

Dr. Seo has published numerous scientific papers, proceedings, and abstracts in peer reviewed scientific journals and has received multiple awards. She has been invited as a speaker in multiple national and international scientific meetings regarding emergency radiology and musculoskeletal radiology. Outside her radiology practice, she works as Korean and Japanese interpreter and a life coach.



**Jeong Mi Park, MD, FSBI**

former Professor of Radiology  
University of Illinois at Chicago, Chicago, IL

Jeong Mi Park, MD, FSBI was the section chief of Breast Imaging and Professor of Radiology at the University of Illinois at Chicago, Chicago, IL. She graduated from Seoul National University College of Medicine in 1985 with M.D. degree and did radiology resident and fellowship training at Seoul National University. Dr. Park did additional 2 years of fellowship trainings at MD Anderson Cancer Center, TX, USA. Dr. Park has published numerous scientific papers, proceedings, and abstracts in peer reviewed scientific journals and has received multiple awards. She has been invited as a speaker in multiple national and international scientific meetings. Dr. Park is interested in all aspects of breast imaging including 2D and 3D Mammography, breast ultrasound, breast MRI and image guided breast interventions.



**Bohyun Kim, MD, PhD**

Section Chief of Genitourinary Radiology, Professor of Radiology  
Mayo Clinic School of Medicine, Rochester, MN

Dr. Bohyun Kim is the section chief of Genitourinary Radiology at Mayo Clinic and Professor of Radiology at the Mayo Clinic School of Medicine, Rochester, MN. He graduated from Seoul National University College of Medicine in 1985 with M.D. degree and did radiology resident training at Seoul National University. He had practiced at Samsung Medical Center, Seoul, Korea for 11 years, then was recruited to Mayo Clinic in 2005.

Dr. Kim has published numerous scientific papers, proceedings, and abstracts in peer reviewed scientific journals and is an internationally renowned expert in Genitourinary Radiology. Dr. Kim is interested in various GU topics. More specifically, his recent research topics include the use of imaging in the diagnosis and assessment of treatment response in autosomal dominant polycystic disease, prediction model for residual disease in ovarian cancer, imaging differentiation of uterine leiomyoma and leiomyosarcoma, and imaging of the urethra and penis.



**Hyunseon Christine Kang, MD, PhD**

Assistant Professor, Department of Diagnostic Radiology,  
The University of Texas MD Anderson Cancer Center, Houston, TX

Dr. Kang is an assistant professor of diagnostic radiology at the University of Texas, MD Anderson Cancer Center. She graduated from Seoul National University College of Medicine in 1998 with MD degree and received a PhD in Neuroscience from Washington University School of Medicine, St Louis, MO in 2004. Dr. Kang did her radiology residency and fellowship at the University of Pennsylvania before she moved to her current position.

Dr. Kang has been working on evaluation of alternative criteria for the assessment of tumor response, particularly in the setting of newer molecularly-targeted therapies, i.e., renal cell carcinoma treated with anti-angiogenic agents. As a promising academic radiologist, Dr Kang's research focuses on the imaging of liver tumors, imaging findings of cholangiocarcinoma treated with various therapies and the pathologic correlation of MRI findings using MRI-TRUS (trans-rectal ultrasound) fusion biopsy.



**Kyongtae Ty Bae, PhD, MD, MBA**

Associate Dean in Clinical Imaging Research  
former Chairman and Professor of the Department of Radiology,  
University of Pittsburg, PA, USA

Kyongtae Ty Bae, PhD, MD, MBA, graduated from Seoul National University with BS in Chemical Engineering, MS in Chemical Engineering from University of Iowa, MS and PhD in Bioengineering from University of Pennsylvania, and MD from University of Chicago. He did his Radiology residency and fellowship training at Mallinckrodt Institute of Radiology, Washington University in St Louis and rose through the academic ranks before moving to University of Pittsburgh. Recently, he graduated from Executive MBA Program at Wharton School of Business. In addition to clinical radiology practice, he has research interests in applying quantitative and physiologic imaging and computer applications in diagnostic imaging including contrast medium pharmacokinetics, functional and physiologic imaging, and computer-aided diagnosis. He has published over 600 papers, proceedings, and abstracts including over 230 peer reviewed journal publications (H-index 61). He is responsible for securing over \$22 million in NIH and DoD grants to pursue research over the past 17 years. He served as Chair of Academic Radiology Research Council and Chair of Radiological Society of North America Research Grant Review Study Sections. He holds twelve patents and founded companies in the field of medical device and informatics. Seven of his patents were licensed for commercial implementations.

## 2. Healthcare Policy (Mini symposium)



**Seon-Kyu Lee, MD, PhD**

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

Seon-Kyu Lee, MD, PhD is the director of Neurointerventional Radiology at the University of Chicago, Chicago, IL, USA. He graduated from Seoul National University College of Medicine in 1989 with M.D. degree and received PhD degree from Seoul National University in 2000. Dr. Lee did radiology resident training at Seoul National University Hospital and did 2 years of Neurointerventional Radiology fellowship trainings at University of Toronto, Toronto, Canada. in 2011. Dr. Lee has published more than 150 scientific papers, proceedings, and abstracts in peer reviewed scientific journals and has been invited as a speaker in multiple national and international scientific meetings. Dr. Lee is also interested in Healthcare Policy and Economics. He is a member of Healthcare Policy and Economics committee of the Society of Neurointerventional Surgery, Economics committee of the American Society of Neuroradiology and Health Services & Research subcommittee of Radiological Society of North America.



**Yong-Jun Shin, MD, PhD**

Assistant Professor, Department of Biomedical Engineering  
University of Connecticut, CT, USA

Dr. Yong-Jun Shin is an assistant professor in the Department of Biomedical Engineering at the University of Connecticut (UConn). His current research interests include the intelligent features of multi-cellular dynamics and distributed/adaptive personalized medicine. Prior to joining UConn, he was a postdoctoral researcher in the School of Electrical and Computer Engineering at Cornell University. He received his M.D. from the Seoul National University College of Medicine and earned his M.S. and Ph.D. in electrical engineering from the University of Texas at Dallas.



**Ji Yun Kang, PhD**

Senior Advisor for Leadership and Organization Development,  
Mayo Clinic, Rochester, MN

Ji Yun Kang is a Senior Advisor for Leadership and Organization Development at Mayo Clinic in Rochester, MN. Dr. Kang is a graduate of Seoul National University, College of Human Ecology with BA, MA and Ph.D. In 2007 she returned to school and earned her Master's and Ph.D degree in Human Resource Development from the University of Minnesota-Twin Cities with emphasis on physician leadership development.

Her main role is to develop both physician and administrative leaders through various leadership development programs and executive coaching including Department & Division chairs, Medical Directors, Program/Committee Chairs, and leaders in the C-Suite. Prior to coming to Minnesota, she worked as a senior researcher at KITECH, a Korean government affiliated research institute being involved in technological consulting for Korean companies. Her career took a major turn when she moved to Rochester in 2005. Dr. Kang received her professional coaching training through the Coaches Training Institute (CTI) and Executive Coaching Program in University of Texas at Dallas, School of Management. She worked as a leadership training faculty for CTI, and has trained hundreds of professionals to be coaching leaders throughout various cities in the U.S., and Canada prior to joining Mayo Clinic in 2013.



**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.



**Kyung Min (Minnie) Song**

Former Senior Manager, Avalere Health

Dr. Kyung Min (Minnie) Song is formerly Senior Manager, Evidence Translation & Implementation practice at Avalere Health, a health policy advisory and business strategy firm based in Washington, D.C. She graduated from Seoul National University College of Medicine in 2009. She then received MPH and MBA from the Johns Hopkins University. 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. Prior to joining Avalere, Dr. Song 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. She is currently developing a communication/classifieds platform for student communities.

March 3, 2017(Friday)

## **New Developments in the Treatment of Lung Cancer: Beyond Targeted Therapy**

**Jin Soo Lee, MD**  
National Cancer Center, Korea

Lung cancer is the leading cause of cancer death worldwide and the majority of patients present with stage IV disease. Over the past half century, we've witnessed great progress and success in basic science and technology that revolutionized our daily medical practice, including the standard of care for lung cancer therapy.

Since 1990's, platinum-based doublets had been considered the standard therapy for "fit" non-small cell lung cancer (NSCLC) patients with median survival duration of only 8 months. Addition of anti-VEGF antibody bevacizumab improved the median survival by 2 months for patients with non-squamous NSCLC who had no contraindication. Pemetrexed combination was also found to be more effective for patients with non-squamous histology than gemcitabine combination.

More recently, targeted therapies administered to patients with biologically relevant biomarkers, such as activating EGFR mutations and ALK alternation, have produced substantial improvements in outcome and rapidly changed the treatment paradigm of NSCLC. Currently molecular analyses of EGFR and ALK alterations are routinely recommended before institution of therapy. Even after the tumor became refractory to the first-line treatment with EGFR and ALK-TKIs, effective drugs are now available which improved the survival of such patients.

In addition, newer treatment modalities, such as immune check-point inhibitors and antibody-drug conjugates are emerging as highly effective therapies that further improve the patient outcome. In fact, three anti-PD-1 agents (Nivolumab, Pembrolizumab, Atezolizumab) are approved by the FDA for the second-line treatment of NSCLC. For selected patients with PD-L1 expression in >50% of cells, Pembrolizumab is approved for the first-line treatment. Chemotherapy is no longer the standard of care in that situation. More exciting results are emerging from trials of combination therapy of anti-PD-1 agents, with either chemotherapy or other immunotherapy agents. Over the next decade, we may witness another milestone in oncology history, "Stage IV NSCLC can be cured."

Learning objectives:

1. Learn about effectiveness of traditional chemotherapy for NSCLC.
2. Learn about improved outcome of NSCLC patients treated by targeted therapy for those whose tumor have relevant biomarkers.
3. Learn about immunotherapy and combination therapies, which are likely to be used in the future for the treatment of stage IV NSCLC

March 3, 2017(Friday)

## Life Stress and PFC Dysfunction

**Seung Kyoong Park, MD**

Professor of Psychiatry

University at Buffalo, Jacobs School of Medicine and Biomedical Sciences

The Prefrontal Cortex (PFC) has expanded greatly in human brain evolution and it occupies almost 30% of the cerebral Cortex. Thus the PFC plays a major role in governing human behavior. This “specifically human functions” are often referred to as “Executive Functions.” These include abstract thinking, problem solving, higher order decision making, regulating inappropriate behaviors, and temporal sequencing of behavior. Some refers to PFC as a CEO of the brain and others call it a conductor of the brain orchestra.

Ego is a center piece of human psychic structure. The healthy Ego functions in psychoanalytic parlance require a well- functioning PFC, which enables us to pursue a goal directed behavior through integration of environment and internal cues. Stress is well known for causing disruptions of various brain functions resulting in mental illnesses. For example, a high level of catecholamine release during stress rapidly impairs the cognitive function of the PFC, while strengthening the emotional and habitual responses of the amygdala and basal ganglia.

PTSD is a powerful example of the fact that psychological experiences lead to neurobiological consequences. Indeed, chronic severe stress and especially when it occurred in early development tend to cause more devastating and often permanent damages in our brain. In this presentation, I will present critical roles of the PFC function in our daily living and review possible mechanisms by which stress can cause its dysfunctions.

Learning objectives:

1. Learn about the functions of the PFC.
2. Learn about the integrated view of psychoanalysis and brain function.
3. Learn about the PFC dysfunction caused by stress.

**March 3, 2017(Friday)**

## **Accelerating Drug Development**

**Kenneth Kim, MD**  
CEO, WCCT Global

In the past ten years, there has been an increase in R&D spending for drug development but with a falling success rate. In this talk, I will be reviewing the drug development process. The agenda will include looking at regulatory and government initiatives, the critical path initiative and specifically the global Pharma's interpretation and CRO response to critical path initiative. I will also review early drug development strategies and give examples of innovative and adaptive drug designs. I will also discuss future trend on where I see drug development is proceeding.

Learning objectives:

1. Learn about factors prohibiting early successful drug development.
2. Learn about how regulatory changes and critical path initiative affect early drug development.
3. Learn about strategies for accelerated drug development.

March 3, 2017(Friday)

## Introduction to “Imaging in Modern Medicine” History of Radiology in Korea

**Joon Koo Han, MD**  
Professor and chairman,  
Seoul National University College of Medicine

In 1895 November 8th, Wilhelm Roentgen first reported the discovery of “new ray”. Soon after the discovery, X-ray was rapidly adopted in medicine, including military medicine (1896, Italo-Abyssian war). Radiology in Korea came from two sources, one from the Japanese Army and the other from American missionaries.

Japanese military officers were impressed by the ability of X-ray for its ability to locate foreign bodies from gun-shot or shrapnel wounds as well as bone injury and by the field use of X-ray machine in Spanish-American war (1898) and Boxer Rebellion (Battle Of Peking, 1900). They rapidly adopted X-ray machine in military hospitals. After colonization of Korea, “조선총독부 의원 (Hospital of the Japanese Government General of Korea)” installed the first X-ray machine in 1911. First paper containing radiographic images was reported in 조선의학회잡지, 1913 by ENT doctor (모리다 시가히코) working at 조선총독부 의원, which was entitled “A case of C1 transverse process anomaly which was protruded into palatine tonsil”.

W.B. Scranton is a Presbyterian missionary doctor who came to Korea in 1885. He opened a private clinic “The Seoul Sanitarium” in 1910 and advertised that his clinic has X-ray machine. Severance hospital built a new hospital and X-ray machine was partially installed in 1912.

The first department of Radiology was founded in 경성제국대학병원, separated from the department of orthopedics in 1940 with 스키스키 모토하루 as the founding professor. Two Korean radiologists, 이부현 and 조중삼 who learned from him, led Korean radiology after the reestablishment of the sovereignty of the nation. The Korean War and subsequent economic predicaments, however, prohibited Korean radiology from growing at a rapid rate as the rest of the world. Nevertheless, CT was first installed in Kyunghee university hospital in 1977, the first MRI was installed in 1984 in Shinwha hospital (0.15 T machine made in Korea). The first superconductive MRI was installed in 1987 in SNUH (2.0T machine made in Korea).

In this presentation, I will discuss the current status of Korean radiology with respect to clinical and academic achievements, and consider factors underlying the rapid growth in Korean Radiology.

Learning objectives:

1. Learn the past and the present of Radiology in Korea.

March 3, 2017(Friday)

## **Advanced Nuclear and Molecular Imagings in the Management of Cancer Patients**

**E. Edmund Kim, MD**

Professor of Radiological Sciences, UCI, USA,  
and Graduate Schools of Seoul National and Kyunghee Universities, Korea

Molecular imaging includes methods of nuclear medicine along with various other different strategies to yield signals. Nuclear medicine uses radiolabeled molecules that produce signals by means of radioactive decay. Other methods of molecular imaging can lead to images via means of sound (ultrasonography), magnetism (MRI) or light (optical techniques of bioluminescence and fluorescence) as well as other emerging techniques such as radionanomedicine.

These molecular imaging procedures offer numerous potentialities in the field of diagnosis as well as therapeutic methods for diseases such as cancer, neurological and cardiovascular disorders. The description of human genome may show a new direction via genomics and proteomics to the molecular and functional imaging methods. One of major problems in the management of cancer patients is an empirical use of new expensive drugs without prediction of their therapeutic responses. Uptake of radiolabeled drugs in the tumor indicates a presence of functioning receptor or enzyme, and thus it is hypothesized that drugs without significant uptakes in the tumor should not be used.

I will provide updated information about molecular imaging in oncology and its clinical applications with examples.

Learning objectives:

1. Learn the various methods of obtaining molecular imaging.
2. Learn the effective use of molecular imaging in the diagnosis and treatment of cancer.

**March 3, 2017(Friday)**

## **New Developments in MRI**

**Timothy J. Carroll, PhD**

Professor of Radiology, University of Chicago

A major development in the management of disease over the last century has been the development of non-invasive medical images. When compared with the invention of x-ray, Magnetic Resonance Imaging (MRI) is relatively new and represents an ongoing and exciting area of medical research. We will review many of the major advances in MRI over the last three decades. A recognized strength of MRI is the availability of adjustable images contrast, and the ability to sensitize MRI to a variety of pathologic conditions. These properties have set MRI apart from other imaging modalities. Given the prevalence and impact of cardiovascular disease and stroke we will review and highlight MRI-based angiographic and physiologic imaging: perfusion, fibrosis, diffusion, oxygen utilization and vascular reserve. Finally, we summarized future directions including quantitative imaging, integration with Big Data and the potential for local gene expression.

Learning objectives:

1. Learn about new techniques of MRI in diagnosis and treatment of cardiovascular disease and stroke
2. Learn about future directions of MRI research including quantitative Imaging and potential use of MRI for local gene expression

March 3, 2017(Friday)

## Neuroimaging: A useful biomarker for schizophrenia

**Jun Soo Kwon, MD, PhD**

Professor of Psychiatry

College of Medicine, Seoul National University

Schizophrenia is a neuropsychiatric disorder presenting psychotic symptoms such as delusions, hallucinations, disorganized speech and behavior, and negative symptoms, which affects about 1 per cent of the general population precipitating a heavy burden to the society. Recent investigations have increasingly focused on the early stage of this disorder, as researchers have recognized the importance of early detection and intervention to delay or even prevent the emergence of psychosis. As such, the concept of “prodromal” and “at-risk” state for schizophrenia has evolved, which is now widely known as clinical high-risk (CHR) for psychosis. An important objective in this field is to enhance our abilities to predict conversion to schizophrenia using various biomarkers such as clinical characteristics, electrophysiological findings, and neurocognitive functions. In this presentation, various neuroimaging techniques and their recent advances will be discussed, and the state-of-the-art of neuroimaging findings on schizophrenia and CHR state and their role as a biomarker will be reviewed.

### Learning Objectives:

1. To understand various neuroimaging techniques and their findings
2. To understand the recent advances in neuroimaging in patients with schizophrenia
3. To understand findings as a biomarker for diagnosis, treatment, and prognosis of schizophrenia

March 3, 2017(Friday)

## **Musculoskeletal Imaging in the ED - multimodality approach**

**Gwy Suk Seo, MD, MSc., PhD**  
Professor of Imaging Sciences  
University Rochester School of Medicine and Dentistry

Musculoskeletal (MSK) imaging in the Emergency Department is mostly for trauma. Although plain radiographs are sufficient in diagnosing the majority of simple fractures, additional imaging modalities are needed in special occasions. Computed Tomography (CT) is used for evaluation of complex fractures or for surgical planning. Magnetic resonance imaging (MRI) is indicated for suspected hip fractures when plain radiograph or CT is negative. Acute infection of the joint or spine is the second most common MSK condition for ED visit. MRI plays a critical role in such cases. On the other hand, some unsuspected MSK conditions discovered by imaging for non-MSK conditions occasionally provide clues for underlying or unknown systemic conditions.

In this presentation, a spectrum of MSK cases encountered in the ED will be discussed. In addition, how MSK imaging can contribute to triage of ED patients will be discussed.

Learning objectives:

1. Learn about the role of MSK imaging in the 24/7 health care environment.
2. Learn about the roles of different modalities for MSK conditions.
3. Learn about the common MSK conditions encountered in the ED.

March 3, 2017(Friday)

## The proper use of imaging studies for Breast Cancer

**Jeong Mi Park, MD, FSBI**  
Former Professor of Radiology  
University of Illinois at Chicago

Breast cancer is the most common cancer in women in the United States, secondary to skin cancer. Early detection is the key to save lives from breast cancer.

The American College of Radiology (ACR) and the Society of Breast Imaging (SBI) recommend screening mammography guidelines for average risk women as annually, starting from age 40, continuing as long as the patient can undergo mammography and has a life expectancy of more than 5 years.

There have been different guidelines from the other organizations. However, experts on mammography and breast cancer have been strongly opposed to these other guidelines for their lack of scientific evidence, use of incorrect data from poorly designed studies, suboptimal mammography techniques. Diagnostic imaging studies are performed when a patient has symptoms such as a palpable mass or if a screening mammography shows an abnormality.

Traditional film-screen mammography has mostly been replaced by digital mammography since the Digital Mammographic Imaging Screening Trial (DMIST) showed better cancer detection capability of digital mammography than film-screen mammography. Tomosynthesis is a 3-dimensional digital mammography technique that has many advantages over the 2-dimensional images.

Ultrasound can be performed as “targeted” for the suspected areas of the breast, or can be performed to detect cancers that mammography cannot detect- especially in dense breasts- which led to the “dense breast legislation” in over 20 States. This law mandates the patients to be informed that their breasts are dense and that there are supplementary screening imaging modalities such as ultrasound and MRI. In cases with neoadjuvant chemotherapy, tumor response to the chemotherapy needs to be evaluated. MRI is the most accurate imaging modality, followed by ultrasound and mammography.

Follow up imaging after breast conserving surgery starts after all the treatment is done and is usually continued every 6 months for 1 year to many years to find a recurrence/new malignancy.

Learning objectives:

1. Learn about the debates regarding mammography screening guidelines.
2. Learn about the roles of imaging in diagnosis of breast cancer.
3. Learn about the roles of imaging in treatment of breast cancer.

