

Seon-Kyu Lee, M.D., Ph.D.

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ACADEMIC APPOINTMENTS

Sep.02~Aug.04	Assistant Professor	Radiology	University of Iowa, IA, USA
Aug.04~Aug.07	Assistant Professor	Medical Imaging	University of Toronto, ON, Canada
Aug.07~Sep.11	Associate Professor	Radiology	Tufts University School of Medicine, Boston, MA, USA
Oct.11~Jan.19	Associate Professor	Radiology	University of Chicago, Chicago, IL, USA
Jan.19~current	Professor	Radiology	Albert Einstein College of Medicine, Bronx, NY, USA

HOSPITAL APPOINTMENTS

Sep.02~Aug.04	Attending Radiologist	Radiology	University of Iowa Hospitals and Clinics, IA, USA
Aug.04~Aug.07	Attending Radiologist	Medical Imaging	Toronto Western Hospital/University Health Network/Hospital for Sick Children, Toronto, ON, Canada
Aug.07~Sep.11	Attending Radiologist	Radiology	Lahey Clinic Medical Center, Burlington, MA, USA
Oct.11~Jan 19	Attending Radiologist	Radiology	University of Chicago Medical Center, Chicago, IL, USA
Jan.2019~current	Attending Radiologist	Radiology	Montefiore Medical Center, Bronx, NY, USA

ACADEMIC TRAINING

1985	Pre-Med Graduate	College of Liberal Arts and Science, Seoul National University, Seoul, South Korea
1989	Doctor of Medicine	College of Medicine, Seoul National University, Seoul, South Korea
1994	Master of Medical Science (Radiology)	Graduate School of Medicine, Seoul National University, Seoul, South Korea
2000	PhD of Medical Science (Radiology)	Graduate School of Medicine, Seoul National University, Seoul, South Korea
2001	International Master Degree in Neurovascular Diseases	Paris SUD University, Bicetre Medical School, France and MAHIDOL University, Ramathibodi and Siriraj Medical School, Thailand (Prof. Pierre Lasjaunias)

Clinical Trainings:

<i>Date</i>	<i>Specialty</i>	<i>Institutions</i>
Mar.89 ~ Feb.90	Rotating Internship	Seoul National University Hospital, Seoul, South Korea
Mar.90 ~ Feb.94	Diagnostic Radiology Residency	Seoul National University Hospital, Seoul, South Korea
Jul. 00 ~ Jun. 02	Interventional Neuroradiology-Clinical Fellowship	University of Toronto, Toronto Western Hospital/ University Health Network/ Hospital for Sick Children, Toronto, ON, Canada (Prof. Karel terBrugge)

SPECIALTY BOARDS AND MEDICAL LICENSES

<i>Dates</i>	<i>Locations</i>	<i>State & Certificate No.</i>
Mar. 1989	Seoul, South Korea,	National Medical License Diplomate, South Korea (#38619)
Mar. 1992	Seoul, South Korea	Korean Board of Diagnostic Radiology Diplomate (#733), South Korea
Oct. 1997	Seoul, South Korea	ECFMG (Educational Commission for Foreign Medical Graduate) Certificate (#0-569-688-5), USMLE (United States Medical License Examination), [#0-569-688-5]

Jul.	2000	Toronto, ON, Canada	CPSO (College of Physicians and Surgeons of Ontario) certificate, (#75392, expired Jul-31-2008)
Aug.	2002	Iowa City, IA, USA.	Iowa Medical License (#35463, expired Jun-01-08)
May	2007	Burlington, MA, USA	Massachusetts Medical License, Full Active License (#231785, expired Jun-01-2012).
May	2011	Chicago, IL, USA	Illinois Medical License, Full Active License (#036127889, expires Jul-31-2020)
May	2012	Chicago, IL, USA	American Board of Radiology, Diagnostic Radiology Diplomate (#57353).
Oct	2014	Chicago, IL, USA	American Board of Radiology, Certification of Added Qualification (CAQ) in Neuroradiology Diplomate (#57353).
Oct	2018	Bronx, NY, USA	New York Medical License, Full Active License (#292153-1, expires Dec-31-2019)
May	2019	Bronx, NY, USA	Certification of The Committee on Advanced Subspecialty Training (CAST) in Neuroendovascular Surgery.

LOCAL/INSTITUTIONAL COMMITTEE/CENTER SERVICES

2002-2004: PACS Committee, Member, Department of Radiology, University of Iowa

2003-2004: Education Committee, Member, Department of Radiology, University of Iowa

2007-2011: Education Committee, Member, Department of Radiology, Lahey Clinic Medical Center

2011~2019: Director, Interventional Neuroradiology, Department of Radiology, University of Chicago

2011: KAIZEN 5S process team (team leader) for Neuro-Interventional 5S process for Center for Care and Discovery (New Hospital Pavilion) Planning, University of Chicago Medical Center

2011: KAIZEN 3P team for Center for Care and Discovery (New Hospital Pavilion), 5th Floor (Interventional and Neurointerventional Suites) Design and Flow Planning. University of Chicago Medical Center

2011~ 2018: Neuroradiology fellowship selection committee, Department of Radiology, University of Chicago

2012~2018: Comprehensive Stroke Center Executive Committee, Member, the University of Chicago Medical Center.

2012~ 2018: Comprehensive Stroke Center Database Sub-Committee, Member, the University of Chicago Medical Center

2013~2018: Co-Director, The HHT (Hereditary Hemorrhagic Telangiectasia) Center of Excellence, The University of Chicago Medical Center.

2013~2018: The Vascular Malformation Center, Member, the University of Chicago Medical Center.

2014~2018: Resident PEC (Program Evaluation Committee), Member, Department of Radiology, University of Chicago

2014~ 2018: The Hodge Award Selection Committee, Member, Department of Radiology, University of Chicago

2016-2018: Faculty Advisory Council (alternate), Biologic Science Division, University of Chicago

2016~2018: The University of Chicago Biological Science Division, Institutional Review Committee (IRB), Member

2018~2018: The University of Chicago, Department of Neurology Chair Search Committee, Member

2019~current: Work flow analysis and improvement committee, Physician Leader, Department of Radiology, Montefiore Medical Center, Physician lead

OTHER MAJOR NATIONAL/INTERNATIONAL COMMITTEE ASSIGNMENTS:

2004-2007: Interventional Committee of CREST (Carotid Revascularization and Endarterectomy and Stenting Trial) study.

2005~2011: Interventional Committee of IMSIII (Interventional Management of Stroke) trial.

2012~current: The Standards and Guidelines Committee, Member, The Society of Neurointerventional Surgery (SNIS)

2013~2018: Executive Committee, Member, The Chicago Academic Institution Stroke Consortium

2014~2018: The web-site development committee, Member, World Federation of Interventional and Therapeutic Neuroradiology (WFITN)

2016-2019: The International Collaborations Committee, Member, American Society of Neuroradiology (ASNR)

2016~current: The Economics Committee, Member, American Society of Neuroradiology (ASNR).

2016-current: Health Services Policy & Research Subcommittee of the Scientific Program Committee (SPC), Member, Radiologic Society of North America (RSNA).

2016-current: Health Care Policy and Economic Committee, Member, Society of Neurointerventional Surgery (SNIS).

2017-current: Content Advisory Panel (CAP) of the Education Committee, Member (Informatics),
Radiologic Society of North America (RSNA).

2017~current: Member, Executive Committee, The World Federation of Interventional and Therapeutic
Neuroradiology (WFITN).

2019~current: Committee on Economics – IR and Cardiovascular, Member, American College of
Radiology (ACR).

2019-current: Program Committee, Member, American Society of Neuroradiology (ASNR).

INVITED, ELECTED, OR APPOINTED EXTRAMURAL SERVICE

2004-2007 Member, Interventional Committee, CREST (Carotid Revascularization Endarterectomy
and Stent Trial).

2007-2013 Member, Interventional Committee, IMS-III (Interventional Management of Stroke)

2007~current Manuscript reviewer for Korean Journal of Radiology

2007-present Manuscript reviewer for Interventional Neuroradiology

2007-present Manuscript reviewer for the Journal of Neurointerventional Surgery

2007-present Manuscript reviewer for the Journal of Vascular Interventional Radiology.

2007-present Manuscript reviewer for Neurosurgery

2012~present Editorial Board, Neurointervention

2012-present Member, Standard and Guideline Committee, Society of Neurointerventional Surgery

2017~present Member at Large, World Federation of Interventional and Therapeutic Neuroradiology
(WFITN).

PROFESSIONAL SOCIETIES

Korean Medical Association (1989 ~)

Korean Radiological Society (1990 ~)

Korean Society of Neuroradiology and Head and Neck Radiology (1997 ~)

Korean Society of PACS (1998 ~)

Korean Society of Medical Ultrasound (1998 ~)

American Society of Interventional and Therapeutic Neuroradiology (2001 ~)

World Federation of Interventional and Therapeutic Neuroradiology (2001 ~)

Radiological Society of North America (2003 ~)

Ontario Medical Association (2005 ~ 2007)

Massachusetts Medical Association (2007~2011)

Illinois Medical Association (2011~present)
International Society of Magnetic Resonance in Medicine (2009~present)
American College of Radiology (2011~present)
American Society of Neuroradiology (2014~present)
American Society of Spine Radiology (2018~present)

SCHOLARSHIP (Recent 5 years)

(a) Peer-reviewed publications in the primary literature, exclusive of abstracts:

1. Oren NC, Chang E, Ynag CW, **Lee SK (Corresponding Author)**. *Brain diffusion imaging findings may predict clinical outcome after cardiac arrest*. J Neuroimaging. 2019 May 20. doi: 10.1111/jon.12626. [Epub ahead of print]
2. Koskimäki F, Bernard J, Yong J, Arndt N, Carroll T, **Lee SK (Co-Author)**, Reder AT, Javed A. *Gray matter atrophy in multiple sclerosis despite clinical and lesion stability during natalizumab treatment*. PLoS One. 2018 Dec 21;13(12):e0209326. doi: 10.1371/journal.pone.0209326. eCollection 2018.
3. **Lee SK**, Mokin M, Hetts S, Fifi J, Boussier M, Fraser J. *Current Endovascular Strategies for Cerebral Venous Thrombosis: Report of the SNIS Standards and Guidelines Committee*. J Neurointerv Surg. 2018. pii: neurintsurg-2018-013973. doi: 10.1136/neurintsurg-2018-013973. [Epub ahead of print]
4. Gandhi CD, Al Mufti F, Singh IP, Abruzzo T, Albani B, Ansari SA, Arthur AS, Bain M, Baxter BW, Bulsara KR, Caplan JM, Chen M, Dabus G, Frei D, Hetts SW, Hussain MS, Jayaraman MV, Kayan Y, Klucznik RP, **Lee SK (Co-Author)**, Mack WJ, Leslie-Mazwi T, McTaggart RA, Meyers PM, Mokin M, Patsalides AT, Prestigiacomo CJ, Pride GL Jr, Starke RM, Sunenshine PJ, Fraser JF; Standards and Guidelines committee of the Society of NeuroInterventional Surgery (SNIS). *Neuroendovascular management of emergent large vessel occlusion: update on the technical aspects and standards of practice by the Standards and Guidelines Committee of the Society of NeuroInterventional Surgery*. J Neurointerv Surg. 2018 Mar;10(3):315-320. doi: 10.1136/neurintsurg-2017-013554. Epub 2018 Jan 11.
5. Polster SP, Zeineddine HA, Baron J, **Lee SK (Co-Author)**, Awad IA. *Patients with cranial dural arteriovenous fistulas may benefit from expanded hypercoagulability and cancer screening*. J Neurosurg. 2017 Nov 17:1-7. doi:0.3171/2017.5.JNS17788

6. Polster S, Zeineddine H, Dougherty M, **Lee SK (Co-Author)**, Frim D. A *Report of Two Cases of Brainstem Hemorrhage After Suboccipital Craniectomy for Chiari Decompression*. Oper Neurosurg (Hagerstown). 2017 Jul 11. doi: 0.1093/ons/opx146.
7. Leslie-Mazwi T, Chen M, Yi J, Starke RM, Hussain MS, Meyers PM, McTaggart RA, Pride GL, Ansari S, Abruzzo T, Albani B, Arthur AS, Baxter BW, Bulsara KR, Delgado Almandoz JE, Gandhi CD, Heck D, Hetts SW, Klucznik RP, Jayaraman MV, **Lee SK (Co-Author)**, Mack WJ, Mocco J, Prestigiacomo C, Patsalides A, Rasmussen P, Sunenshine P, Frei D, Fraser JF; Standards and Guidelines committee of the Society of NeuroInterventional Surgery (SNIS). *Post-thrombectomy management of the ELVO patient: Guidelines from the Society of NeuroInterventional Surgery*. J Neurointerv Surg. 2017 Dec;9(12):1258-1266. doi: 10.1136/neurintsurg-2017-013270. Epub 2017 Sep 29.
8. **Lee SK**, Thomas K, Tsapatsaris N, Al-Mufti F, Piemonte T, Jewel E, Hreib K. *Craniocervical Artery Dissection: Clinical and Imaging Mid-term Follow up*. J Neurol Disord 2016;4:308. doi:10.4172/2329-6895.1000308
9. Pride GL, Fraser JF, Gupta R, Alberts MJ, Rutledge JN, Fowler R, Ansari SA, Abruzzo T, Albani B, Arthur A, Baxter B, Bulsara KR, Chen M, Delgado Almandoz JE, Gandhi CD, Heck D, Hetts SW, Hirsch JA, Hussain MS, Klucznik R, **Lee SK (Co-Author)**, Mack WJ, Leslie-Mazwi T, McTaggart RA, Meyers PM, Mocco J, Prestigiacomo C, Patsalides A, Rasmussen P, Starke RM, Sunenshine P, Frei D, Jayaraman MV; Standards and Guidelines Committee of the Society of NeuroInterventional Surgery (SNIS). *Prehospital care delivery and triage of stroke with emergent large vessel occlusion (ELVO): report of the Standards and Guidelines Committee of the Society of Neurointerventional Surgery*. J Neurointerv Surg. 2016 Oct 5. pii: neurintsurg-2016-012699. doi: 10.1136/neurintsurg-2016-012699. [Epub ahead of print].
10. J Mocco, MD; Osama O. Zaidat, MD; Rüdiger von Kummer, MD; Albert J. Yoo, MD; Rishi Gupta, MD; Demetrius Lopes, MD; Don Frei, MD; Harish Shownkeen, MD; Ron Budzik, MD; Zahra A. Ajani, MD; Aaron Grossman, MD; Dorethea Altschul, MD; Cameron McDougall, MD; Lindsey Blake, MD; Brian-Fred Fitzsimmons, MD; Dileep Yavagal, MD; John Terry, MD; Jeffrey Farkas, MD; **Seon Kyu Lee, MD (Co-Author)**; Blaise Baxter, MD; Martin Wiesmann, MD; Michael Knauth, MD; Donald Heck, MD; Syed Hussain, MD; David Chiu, MD; Michael J. Alexander, MD; Timothy Malisch, MD; Jawad Kirmani, MD; Laszlo Miskolczi, MD; Pooja Khatri, MD; for the THERAPY Trial Investigators*. *Aspiration Thrombectomy After Intravenous Alteplase Versus Intravenous Alteplase Alone*. Stroke. 2016;47:00-00. DOI: 10.1161/STROKEAHA.116.013372.

11. Lavine SD, Cockroft K, Hoh B, Bambakidis N, Khalessi AA, Woo H, Riina H, Siddiqui A, Hirsch JA, Chong W, Rice H, Wenderoth J, Mitchell P, Coulthard A, Signh TJ, Phatorous C, Khangure M, Klurfan P, terBrugge K, Iancu D, Gunnarsson T, Jansen O, Muto M, Szikora I, Pierot L, Brouwer P, Gralla J, Renowden S, Andersson T, Fiehler J, Turjman F, White P, Januel AC, Spelle L, Kulcsar Z, Chapot R, Spelle L, Biondi A, Dima S, Taschner C, Szajner M, Krajina A, Sakai N, Matsumaru Y, Yoshimura S, Ezura M, Fujinaka T, Iihara K, Ishii A, Higashi T, Hirohata M, Hyodo A, Ito Y, Kawanishi M, Kiyosue H, Kobayashi E, Kobayashi S, Kuwayama N, Matsumoto Y, Miyachi S, Murayama Y, Nagata I, Nakahara I, Nemoto S, Niimi Y, Oishi H, Satomi J, Satow T, Sugiu K, Tanaka M, Terada T, Yamagami H, Diaz O, Lylyk P, Jayaraman MV, Patsalides A, Gandhi CD, **Lee SK (Co-Author)**, Abruzzo T, Albani B, Ansari SA, Arthur AS, Baxter BW, Bulsara KR, Chen M, Delgado Almandoz JE, Fraser JF, Heck DV, Hetts SW, Hussain MS, Klucznik RP, Leslie-Mawzi TM, Mack WJ, McTaggart RA, Meyers PM, Mocco J, Prestigiacomo CJ, Pride GL, Rasmussen PA, Starke RM, Sunenshine PJ, Tarr RW, Frei DF, Ribo M, Nogueira RG, Zaidat OO, Jovin T, Linfante I, Yavagal D, Liebeskind D, Novakovic R, Pongpech S, Rodesch G, Soderman M, terBrugge K, Taylor A, Krings T, Orbach D, Biondi A, Picard L, Suh DC, Tanaka M, Zhang HQ. *Training Guidelines for Endovascular Ischemic Stroke Intervention: An International Multi-Society Consensus Document*. AJNR Am J Neuroradiol 2016 Apr;37(4):E31-4. doi: 10.3174/ajnr.A4766. Epub 2016 Feb 18.
12. Heit JJ, Do HM, Prestigiacomo CJ, Delgado-Almandoz JA, English J, Gandhi CD, Albuquerque FC, Narayanan S, Blackham KA, Abruzzo T, Albani B, Fraser JF, Heck DV, Hussain MS, **Lee SK (Co-Author)**, Ansari SA, Hetts SW, Bulsara KR, Kelly M, Arthur AS, Patsalides A, Pride GL, Powers CJ, Alexander MJ, Meyers PM, Jayaraman MV; SNIS Standards and Guidelines committee. *Guidelines and parameters: percutaneous sclerotherapy for the treatment of head and neck venous and lymphatic malformations*. J Neurointerv Surg. 2016 Jan 22. pii: neurintsurg-2015-012255. doi: 10.1136/neurintsurg-2015-012255.
13. **Lee SK (Corresponding Author)**, Hetts SW, Halbach V, terBrugge K, Ansari SA, Albani B, Abruzzo T, Arthur A, Alexander M, Albuquerque F, Baxter B, Bulsara K, Chen M, Almandoz JE, Fraser J, Frei D, Gandhi C, Heck D, Hussain S, Kelly M, Klucznik M, Leslie-Mazwi T, McTaggart RA, Meyers P, Patsalides A, Prestigiacomo C, Pride GL, Starke R, Sunenshine P, Rasmussen P, Jayaraman MV on behalf of the Standards and Guidelines Committee for the Society for NeuroInterventional Surgery. *Standard and Guideliens: Intracranial Dural Arteriovenous Shunts*. J Neurointerv Surg 2015 J NeuroInterv Surg doi:10.1136 / neurintsurg-2015-012116 [Epub ahead of print].

14. Ginat DT, Uppuluri P, Christoforidis G, Katzman G, **Lee SK (Senior Author)**. *Identification of Neuroradiology MRI protocol errors via Quality-Driven categorization approach*. J Am Coll Radiol 2015 Oct 23. pii: S1546-1440(15)00869-8. doi: 10.1016/j.jacr.2015.08.027. [Epub ahead of print].
15. Eliyas JK, Niekrasz M, Wardrip C, **Lee SK (Senior and Corresponding Author)**. *Focused post mortem dissection technique for harvest of rete mirabile in domestic swine (Sus scrofa)*. J Neurointerv Surg 2015 Sep 10 pii: neurintsurg-2015-011949. doi: 10.1136/neurintsurg-2015-011949.
16. Ginat DT, **Lee SK (Co-Author)**. *Neuroimaging Manifestations of PHACE syndrome*. Pediatr Neurol. 2015 Sep;53(3):274-275.
17. McTaggart RA, Ansari SA, Goyal M, Abruzzo TA, Albani B, Arthur AJ, Alexander MJ, Albuquerque FC, Baxter B, Bulsara KR, Chen M, Almandoz JE, Fraser JF, Frei D, Gandhi CD, Heck DV, Hetts SW, Hussain MS, Kelly M, Klucznik R, **Lee SK (Co-Author)**, Leslie-Mawzi T, Meyers PM, Prestigiacomo CJ, Pride GL, Patsalides A, Starke RM, Sunenshine P, Rasmussen PA, Jayaraman MV; Standards and Guidelines Committee of the Society of NeuroInterventional Surgery (SNIS). *Initial hospital management of patients with emergent large vessel occlusion (ELVO): report of the standards and guidelines committee of the Society of NeuroInterventional Surgery*. J Neurointerv Surg. 2015 Aug 31. pii: neurintsurg-2015-011984. doi: 10.1136/neurintsurg-2015-011984.
18. Purakal AS, Ginat DT, **Lee SK (Senior Author)**. *Successfully treated symptomatic fusiform basilar artery aneurysm in a patient with hindbrain malformation via inverted Y-stenting*. J Neurointerv Surg 2015 doi: 10.1136/bcr-2014-011590.
19. Jayaraman MV, Hussain MS, Abruzzo T, Albani B, Albuquerque FC, Alexander MJ, Ansari SA, Arthur AS, Baxter B, Bulsara KR, Chen M, Delgado-Almandoz JA, Fraser JF, Heck DV, Hetts SW, Kelly M, **Lee SK (Co-Author)**, Leslie-Mawzi T, McTaggart RA, Meyers PM, Prestigiacomo C, Pride GL, Patsalides A, Starke RM, Tarr RW, Frei D, Rasmussen P; Standards and Guidelines Committee of the Society of NeuroInterventional Surgery (SNIS). *Embolectomy for stroke with emergent large vessel occlusion (ELVO): report of the Standards and Guidelines Committee of the Society of NeuroInterventional Surgery*. J Neurointerv Surg. 2015 May;7(5):316-21. doi: 10.1136/neurintsurg-2015-011717. Epub 2015 Mar 12.

(b) *Published abstracts*

Scientific Oral Presentations:

1. **Lee SK (presenting and corresponding author)**, Oren C, Ramos E, Pitroda S, Patel J. Can radiofrequency ablation and vertebral augmentation for osteolytic spine metastasis achieve both pain relief and structural stability? Presented at the American Society of Neuroradiology 56th Annual Meeting, 2018, Vancouver, BC, Canada.
2. **SK Lee (presenting and corresponding author)**, T Van Ha, Yassan, J Hart, A Ostdiek, Y, Zhu, S Yi, EA Scott, GA Ameer. Thermoresponsive Nanonet for transarterial Immunomodulatory Chemo-Embolization: An Experimental Study for Rabbit Liver Cancer model. Presented at the Society of Interventional Radiology Annual Conference 2018, Vancouver, BC, Canada
3. **Lee SK (presenting and corresponding author)**, Yuan C, Theodore K. Clinical outcome of ruptured aneurysm treatment in the US: National inpatient sample data (DIS) analysis. Presented at the 14th WFITN (World Federation of Interventional Therapeutic Neuroradiology) Congress 2017, Budapest, Hungary.
4. **Lee SK (presenting and corresponding author)**, Lyttle C, Nicola G, Hirsch J. Economic impact of intra arterial therapy for acute ischemic stroke in the US; Marketscan Database analysis. Presented at the American Society of Neuroradiology 55th Annual Meeting, 2017, Long Beach, CA, USA
5. Yuan C, Karrison T, **Lee SK (senior and corresponding author)**. Has endovascular treatment for intracranial aneurysm reached technical maturity? Presented at the American Society of Neuroradiology 55th Annual Meeting, 2017, Long Beach, CA, USA
6. Aftab S, Ali S, Mok J, **Lee SK (senior author)**. 3D cone beam computerized tomography (3D-CBCT) guided sacroiliac (SI) joint injection: A real-time, interactive, Accurate, Fast and Reduced Radiation Exposure Technique. Presented at the American Society of Neuroradiology 55th Annual Meeting, 2017, Long Beach, CA, USA
7. **Lee SK (Presenting and Corresponding Author)**, Qandeel M, Yang C, Ali S, Jahanger K. Non-contrast inflow enhanced inversion recovery with 3D Fast Spin Echo (IFIR-FSE) with fast image acquisition using compressed sensing (CS) technique has potential to be a viable alternative to contrast enhanced MRA (CE-MRA) for the evaluation of neck vasculature. Presented at the American Society of Neuroradiology 54th Annual Meeting, 2016, Washington DC, USA.
8. **Lee SK (Presenting and corresponding author)**, Yang J, Niekrasz M, Chang A, Pytel P, Ameer G. *Thermoresponsive PPCN-contrast Complex: a Novel Liquid Embolic Agent for Embolotherapy*. Presented at WFITN 2015, Gold Coast, Australia

9. **Lee SK (Presenting and corresponding author)**, Ginat D, Collins J, Portugal L, Ardel A. *The Stroke risks of parent artery sacrifice in malignant head and neck tumor patients who passed carotid balloon test occlusion*. Presented at WFITN 2015, Gold Coast, Australia
10. **Lee SK (Presenting and corresponding author)**, Yang J, Eliyas-Khader J, Niekrasz M, Wardrip C, Chang A, Pytel P, Ameer G *Thermo-Responsive PPCN-Contrast Complex as a Novel Liquid Embolic Agent: An Experimental Study*. Presented at the 53rd Annual Meeting of the American Society of Neuroradiology (ASNR), 2015, Chicago, IL, USA
11. **Lee SK (Presenting and corresponding author)**, Eliyas-Khader J, Ginat D, Collins J, Portugal L. *Head and Neck Malignancy related Carotid Blow Out Syndrome (CBS): Long term Clinical Outcome after Active Interventions*. Presented at the 53rd Annual Meeting of the American Society of Neuroradiology (ASNR), 2015, Chicago, IL, USA
12. Purakal A, **Lee SK (Senior author)**, Ginat DT. *Successfully Treated Symptomatic Partially Thrombosed Fusiform Basilar Artery Aneurysm in a Patient with Hindbrain Malformation via Inverted Y-Stenting*. Presented at the 53rd Annual Meeting of the American Society of Neuroradiology (ASNR), 2015, Chicago, IL, USA
13. Collins J, McCann S, Kromrey D, Ginat D, **Lee SK (Senior author)**. *DSC MR Perfusion Imaging may Identify Incipient Progression or Suspected Recurrence of Post-treatment GBM: Preliminary Study*. Presented at the 53rd Annual Meeting of the American Society of Neuroradiology (ASNR), 2015, Chicago, IL, USA

Scientific Exhibits (Poster/Electronic) Presentations:

1. **Lee SK (presenting and corresponding author)**, Yuan C, Karrison T. Clinical outcomes of unruptured arterial aneurysm treatment in the US. Presented at the International Stroke Conference 2018, Los Angeles, CA, USA
2. Yuan C, Karrison T, **Lee SK (senior and corresponding author)**. Real-world clinical outcomes of ruptured intracranial arterial aneurysm treatment. Presented at the International Stroke Conference 2018, Los Angeles, CA, USA
3. Chang E, Yang C, **Lee SK (Senior Author)**. Patterns of post cardiopulmonary arrest brain MR findings correlated with clinical outcome. Presented at the 102nd Scientific Assembly and Annual meeting of the Radiologic Society of North America, 2016, Chicago, IL, USA.
4. Al-Saraf A, Ali S, Qandeel M, Ramos E, **Lee SK (Senior Author)**. Retroclival subdural hematoma: clinical outcomes and radiologic findings. Presented at the 84th American Association of Neurological Surgery (AANS) Annual Scientific Meeting, 2016, Chicago, IL, USA
5. Chaudhry TA, Lu ZF, Rozenfeld M, **Lee SK (Corresponding and Senior Author)**, Image

Noise Reduction Technology Reduces Patient Radiation Exposure is Independent to Operator Factors. Presented at the American Society of Neuroradiology 54th Annual Meeting, 2016, Washington DC, USA.

6. Qandeel M, Al-Saraf A, Ali S, Ramos E, **Lee SK (Senior Author)**, Retroclival hemorrhage: Where is the Blood?. Presented at the American Society of Neuroradiology 54th Annual Meeting, 2016, Washington DC, USA.
7. **Lee SK (Presenting and Corresponding Author)**, Elias Khader J, Niegrasz M, Wardrip C. *Angiographic anatomy and targeted surgical dissection technique of Swine Rete Mirabile*. Presented at the 53rd Annual Meeting of the American Society of Neuroradiology (ASNR), 2015, Chicago, IL, USA

RESEARCH FUNDING

(a) Current:

1. *Grant Title:* Brain Parenchymal Permeability measurement using DCE MR Perfusion technique in ICH (intracerebral hemorrhage) patients, *Funding Agency:* Radiology Research Seed Funding, University of Chicago, USA, *Period:* Jan. 2017 ~ 2019, *Role:* Principal Investigator..
2. *Grant Title:* Transarterial Immunomodulatory Embolization: A novel approach to cancer therapy, *Funding Agency:* NIH/NIBIB, USA, *Period:* Apr. 2016 ~ 2019, *Role:* Principal Investigator of the University of Chicago [subcontract with Northwestern University, Department of Biomedical Engineering, PI: Ameer, Guillermo PhD], Application number: 1 R21 EB022291-01.

(b) Past:

1. *Grant Title:* Cost Utility Study for Acute Ischemic Stroke Management Using Market Scan Data Base. CHeSS Methods Core Biostatistics Core Facility Subsidy Fund. *Funding agency:* The University of Chicago, CTSA-Institute for Translational Medicine and Core Support and Technology Cluster, *Role:* Principal Investigator, National Center for Advancing Translational Sciences of the National Institutes of Health through Grant Number UL1 TR000430.
2. *Grant Title:* Regional and Practice Based Intracranial Aneurysm Treatment Tendency, Outcome Variation and Its Cost Comparison from 2007-2012, Biostatistics Core Facility Subsidy Fund. *Funding agency:* The University of Chicago, CTSA-Institute for Translational Medicine and Core Support and Technology Cluster, *Role:* Principal

Investigator, National Center for Advancing Translational Sciences of the National Institutes of Health through Grant Number UL1 TR000430.

3. *Grant Title*: Targeted Molecular MR Imaging using Micelle-Fibrin-Gadolinium Complex on Glioma Animal Model. *Funding Agency*: Core Facility Subsidy Grant, ITM (Institution of Translational Medicine), The University of Chicago, *Period*: 2014 ~ 2015, *Role*: Principal Investigator of the University of Chicago.
4. *Grant Title*: Patient Specific Wall Shear Stress (WSS) Analysis using Phase Contrast Magnetic Resonance Angiography for Intracranial Aneurysm. *Funding Agency*: The Lahey Clinic Radiology Research Fund (RRF), *Period*: May. 2009 ~ 2012, *Role*: Principal Investigator.

Clinical Trials

(a) Current

1. *WEAVE (Wingspan Stent System Post Market Surveillance) Study*, *Funding Agency*: Stryker Inc. CA, USA. *Period*: 2017-2019, *Role*: Principle Investigator of the University of Chicago, Chicago, IL.
2. *CREST-2 (Carotid Revascularization and Endarterectomy and Stenting Trial-2)*, *Funding Agency*: NIH/NINDS, USA. *Period*: 2016-2019, *Role*: Co-Investigator of the University of Chicago, IL,

(b) Past

1. *Grant Title*: THERAPY (The Randomized, Concurrent Controlled Trial to Assess the Penumbra System's Safety and Effectiveness in the Treatment of Acute Stroke) Trial, *Funding Agency*: Penumbra Inc. *Period*: Jun. 2013 ~ 2015, *Role*: Principal Investigator of the University of Chicago.
2. *Grant Title*: IMS III (Interventional Management of Stroke III), *Funding Agency*: NIH/NINDS, USA, *Period*: Apr. 2008 ~ 2012, *Role*: Principal Investigator of the Lahey Clinic Medical Center, Burlington, MA.
3. *Grant Title*: CREST (Carotid Revascularization Endarterectomy and Stent Trial), *Funding Agency*: NIH/NINDS, USA, *Period*: Sep. 2004~ Aug. 2007, *Role*: Principal Investigator of the Toronto Western Hospital/University Health Network/University of Toronto.
4. *Grant Title*: CAFÉ (Cancer patient Fracture Evaluation with Kyphoplasty), *Funding Agency*: Kyphon Inc., CA, USA, *Period*: Feb. 2007 ~ Aug. 2007, *Role*: Principal Investigator of the Toronto Western Hospital/University Health Network/University of Toronto.

INVITED LECTURE/SPEACH

(a) Extramural

- May 2018 *Neurointerventional Radiology: Introduction*
Midwest Interventional Radiology Medical Student Symposium, Chicago, IL, USA.
- Jan 2018 *Acute Ischemic Stroke: Advanced Neurointerventional Care.*
The 14th Dong-A Radiology Seminar, Department of Radiology, Dong-A University Medical Center, Pusan, South Korea
- Jan 2018 *Interventional Management of Metastatic Cancer to Spine.*
New Journey Mega International Healthcare, Beijing, China
- Jan 2018 *Updates of Advanced Neurointerventional Management in Acute Ischemic Stroke.*
Department of Radiology, Peking Union Medical College Hospital, Beijing, China
- Jan 2018 *Impact of IR Management of Acute Stroke on US Health Care.*
Interventional Radiology Practice in the United States and East Asia, The University of Chicago Center in Hong Kong, Hong-Kong.
- Jan 2018 *Methods of Reimbursement impact on Quality.*
Interventional Radiology Practice in the United States and East Asia, The University of Chicago Center in Hong Kong, Hong-Kong.
- Nov 2017 *Interventional Management of Acute Stroke (Keynote Speaker)*
2017 Prairie Vascular Symposium, Carbondale, IL, USA.
- Apr 2017 *Neurointerventional Radiology: Introduction*
Midwest Interventional Radiology Medical Student Symposium, Chicago, IL, USA.
- Mar 2017 *The US Medicare Payment Reform (MACRA): It's NOT just Permanent Doc-Fix!*
Seoul National University College of Medicine Alumni Scientific Conference, City of Industry, CA, USA
- Feb 2017 *Introduction of Neurointerventional Radiology*
Chicago Radiological Society, Chicago, IL, USA
- Jun 2016 *Advanced Imaging and Current Neurovascular management for acute ischemic stroke.*

Seoul National University College of Medicine Alumni Scientific
Conference, Washington DC, MD, USA

- Mar. 2016 *Neurointerventional Radiology: Introduction*
Midwest Interventional Radiology Medical Student Symposium, Chicago,
IL, USA.
- Jul 2015 *Spinal Angiography and Embryology*
Interventional Neuroradiology Round, UCSF, San Francisco, CA, USA.
- Mar. 2015 *Neurointerventional Radiology: Introduction.*
Midwest Interventional Radiology Medical Student Symposium, Chicago,
IL, USA.

(b) Intramural

- Jan 2018 *Percutaneous Management for Spinal Metastasis*
Chest Oncology Working Group, Department of Internal Medicine, The
University of Chicago.
- Apr 2017 *Diagnosis and Management of Carotid Artery Occlusive Disease, Carotid
artery Fibromuscular Dysplasia.*
The University of Chicago Medicine, Department of Surgery (Vascular
Surgery), Vascular Surgery Fellowship Lecture Series
- Feb 2017 *Neurointerventional Management of Painful Vertebral Body Compression
fracture with Vertebroplasty/Kyphoplasty*
The University of Chicago Medicine, Department of Medicine, Chicago,
IL, Internal Medicine Topic Lecture
- July 2016 *Anesthesia and Neurointervention*
The University of Chicago Medicine, Department of Anesthesia, Chicago,
IL Grand Round
- May 2016 *Neurointervention for Otolaryngology and Head and Neck Surgery*
The University of Chicago Medicine, Department of Surgery
(Otolaryngology and head and neck surgery), Chicago, IL Grand Round
- Jun 2015 *Indications, Techniques and Outcomes of Vertebroplasty/Kyphoplasty*
The University of Chicago Medicine, Department of Surgery (Orthopedic
Surgery), Chicago, IL Grand Round

- Mar 2015 *Cerebral Surface Anatomy: MRI overview*
The University of Chicago Medicine, Department of Neurology, Chicago,
IL., Grand Round.
- Feb 2015 *Dural Arteriovenous Shunt*
The University of Chicago, Department of Surgery (Neurosurgery),
Chicago, IL Grand Round.

HONORS, PRIZES, AND AWARDS

Top Doctors America by Castle Connolly 2014, 2015, 2016, 2017, 2018, 2019

Top Doctors Chicago, Chicago Magazine 2014, 2015, 2016, 2018, 2019

Chicago Radiological Society Resident Poster Neuroradiology division winner. Yuan C, Karrison T, Lee SK (**supervising faculty**). Real-World Clinical Outcomes of Ruptured Intracranial Arterial Aneurysm Treatment. Jan 2018.