

# CURRICULUM VITAE

## PERSONAL



- ◆ **Name:** Sun-Ho Lee, M.D.
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## EXPERIENCE

### SAMSUNG MEDICAL CENTER, SUNGKYUNKWAN UNIVERSITY

Seoul, Korea

- ◆ **Professor-** Department of Neurosurgery, Spine center 04/2021 ~ Present
- ◆ **Associate professor-** Department of Neurosurgery, Spine center 03/2014 ~ 03/2021
- ◆ **Assistant professor-** Department of Neurosurgery, Spine center 09/2008 ~ 02/2014

### KYUNGPOOK NATIONAL UNIVERSITY HOSPITAL

Daegu, Korea

- ◆ **Assistant professor-** Department of Neurosurgery 03/2007 ~ 08/2008

## MEMEBERSHIP

- Member of the Korean Neurosurgical Society
- Member of the Korean Spinal Neurosurgery Society
- Member of the Korean Neurotraumatology Society
- International member of American Association of Neurological Surgeons
- International member of Congress of Neurological Surgeons

## AWARDS AND HONORS

- The Yearly Resident , Kyungpook National University Hospital 2003
- Academic Award in Annual meeting of The Korean Neurosurgery Society 2013
- Best poster award in Annual meeting of Korean Spinal Neurosurgery Society 2014
- Best oral poster award in Annual meeting of Korean Spinal Neurosurgery Society 2015

## OTHER ACTIVITIES

- Treasurer, The Korean Board of Neurosurgeon in KNS 06/2007 ~08/2008
- Treasurer, Publicity committee in Korean Neurosurgery Society 06/2010 ~ 06/2011
- Treasurer, Scientific committee in Annual meeting of WFNS 2013 02/2012 ~ 09/2013
- Treasurer, Scientific committee in Korean Spinal Neurosurgery Society 09/2012 ~10/2013
- Treasurer, Residency Review & Education Committee in KNS 10/2020 ~ 10/2022
- Chair, Scientific committee in Korean Spine oncology research society 02/2020 ~ 02/2022
- Chair, Information & Technology Committee in Korean Spinal Neurosurgery Society 10/2020 ~ 9/2022
- Editorial Board Member of Neurospine 10/2011 ~ 09/2019
- Review Board of Journal of Korean Neurosurgery Society 10/2012 ~ present
- Editor of Neurospine 10/2019 ~ present
- Chair, Scientific committee, Korean Spinal Neurosurgery Research Society 09/2021~ present
- Secretary General in Korean Spine oncology research society 02/2022 ~ present
- Chair, Scientific committee, Korean Digital Convergent Neurosurgery Society 06/2022~ present
- Bi-chair, Scientific committee in Korean Spinal Neurosurgery Society 09/2022~ present
- Chair, AI Big data Committee Chair in Korean Spinal Neurosurgery Society 09/2020 ~ present
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## ACADEMIC INTERESTS

- **CLINICAL PRACTICE:** Spinal column and spinal cord tumor,  
Degenerative and traumatic cervical spine disorder
- **BASIC RESEARCH:** Spinal cord injury and regeneration, artificial intelligence, Machine learning

## RECENT PUBLICATIONS

### Peer Reviewed Scientific Journal Articles

1. Ryu SM, Seo SW, **Lee SH**. Novel prognostication of patients with spinal and pelvic chondrosarcoma using deep survival neural networks. BMC Med Inform Decis Mak. 2020 Jan 6;20(1):3.
2. Lee JH, Kim HS, Yoon YC, Cha MJ, **Lee SH**, Kim ES. Differentiating between spinal schwannomas and meningiomas using MRI: A focus on cystic change. PLoS One. 2020 May 29;15(5):e0233623
3. Roh J, Hwang SM, **Lee SH**, Lee K, Kim YH, Park CK. Functional Expression of Piezo1 in Dorsal Root Ganglion (DRG) Neurons. Int J Mol Sci. 2020 May 28;21(11):3834
4. Park JH, **Lee SH**, Kim ES, Eoh W. Analysis of postoperative dysphagia after anterior cervical decompression and fusion. Br J Neurosurg. 2020 Aug;34(4):457-462.
5. Kim SK, Ryu S, Kim ES, **Lee SH**, Lee SC. Radiologic Efficacy and Patient Satisfaction after Minimally Invasive Unilateral Laminotomy and Bilateral Decompression in Patients with Lumbar Spinal Stenosis: A Retrospective Analysis. J Neurol Surg A Cent Eur Neurosurg. 2020 Nov;81(6):475-483.
6. Lee CH, Hong JT, **Lee SH**, Yi S, Sohn MJ, Kim SH, Chung CK; Korean Spine Oncology Research Society. Is the Spinal Instability Neoplastic Score Accurate and Reliable in Predicting Vertebral Compression Fractures for Spinal Metastasis? A Systematic Review and Qualitative Analysis. J Korean Neurosurg Soc. 2021 Jan;64(1):4-12.

7. Kwon H, Lee S, **Lee SH**, Kim ES. Dural rupture and subsequent spinal cord herniation due to closed wound suction drainage after spinal surgery. *Br J Neurosurg.* 2021 Feb 12;1-3.
8. Won JS, Yeon JY, Pyeon HJ, Noh YJ, Hwang JY, Kim CK, Nam H, Lee KH, **Lee SH**, Joo KM. Optimal Preclinical Conditions for Using Adult Human Multipotent Neural Cells in the Treatment of Spinal Cord Injury. *Int J Mol Sci.* 2021 Mar 4;22(5):2579.
9. Kim H, Pyo H, Park HC, Lim DH, Yu JI, Park W, Ahn YC, Choi DH, Oh D, Noh JM, Cho WK, Yoo GS, Jung SH, Kim ES, **Lee SH**, Park SJ, Lee CS. Clinical and dosimetric risk factors for vertebral compression fracture after single-fraction stereotactic body radiation therapy for spine metastases. *J Bone Oncol.* 2021 May 1;28:100368.
10. Zuckerman SL, **Lee SH**, Chang GJ, Walsh GL, Mehran RJ, Gokaslan ZL, Rao G, Tatsui CE, Rhines LD. Outcomes of Surgery for Sacral Chordoma and Impact of Complications: A Report of 50 Consecutive Patients With Long-Term Follow-Up. *Global Spine J.* 2021 Jun;11(5):740-750.
11. Kim SS, Pyeon HJ, Bae YK, Nam H, Kim CK, **Lee SH**, Joo KM. Adult Human Multipotent Neural Cells Could Be Distinguished from Other Cell Types by Proangiogenic Paracrine Effects via MCP-1 and GRO. *Stem Cells Int.* 2021 Aug 12;2021:6737288.
12. Nam H, Lee IH, Sa JK, Kim SS, Pyeon HJ, Lee KH, Lee K, **Lee SH**, Joo KM. Effects of Long-Term In Vitro Expansion on Genetic Stability and Tumor Formation Capacity of Stem Cells. *Stem Cell Rev Rep.* 2022 Jan;18(1):241-257.
13. Kim SH, **Lee SH**, Shin DA. Could Machine Learning Better Predict Postoperative C5 Palsy of Cervical Ossification of the Posterior Longitudinal Ligament? *Clin Spine Surg.* 2022 Jun 1;35(5):E419-E425
14. Kim CK, Won JS, An JY, Lee HJ, Nam AJ, Nam H, Lee JY, Lee KH, **Lee SH**, Joo KM. Significant Therapeutic Effects of Adult Human Neural Stem Cells for Spinal Cord Injury Are Mediated by Monocyte Chemoattractant Protein-1 (MCP-1). *Int J Mol Sci.* 2022 Apr 12;23(8):4267
15. Ha GH, Kim EJ, Park JS, Kim JE, Nam H, Yeon JY, **Lee SH**, Lee K, Kim CK, Joo KM. JAK2/STAT3 pathway mediates neuroprotective and pro-angiogenic treatment effects of adult human neural stem cells in middle cerebral artery occlusion stroke animal models. *Aging (Albany NY).* 2022 Nov 29;14(22):8944-8969. Epub 2022 Nov 29.
16. Lee S, Min S, Han J, Kim ES, **Lee SH**. Long-term Follow-up Results of Reconstructive Laminoplasty With L-shaped Leibinger Mini-plate for Posterior Approach in the Treatment of Intraspinous Tumor Surgery. *World Neurosurg.* 2023. Epub 2022 Dec 12.