# **Curriculum Vitae**

Dr. Chang Ju Hwang

Last name: Hwang, First name: Chang Ju

Date of birth: January, 30, 1972

Nationality: South Korea

Marital status/Sex: Married/Male

Social Security Number (Korea): 720130-1024710

Social Security Number (USA): 184-84-8929

Present Address: Hyundai apt. 84-1006, Apkujung-dong, Kangnam-gu, Seoul, Korea

Telephone: 82-2-542-9700

Working Hospital: Asan Medical Center, 88 Olympic-ro 43-gil, Songpa-gu, Seoul 138-736, Korea

Medical school: College of Medicine, Seoul National University, Korea

Postgraduate school: Master, College of Medicine, Seoul National University, Korea

Doctor, College of Medicine, Seoul National University, Korea

Internship and Residency: Seoul National University Hospital, Korea

Qualification: Korean Doctor Certificate number 62751(Feb, 1997)

Korean Orthopaedic Board number 3438(Mar, 2002)

Member, Korean Society of Spine Surgery

Member, Korean Society of Spine Tumor

Member, North American Spine Society

Active fellow, Scoliosis Research Society

# Professional experience:

Feb. 2023 - Date: Chief of Scoliosis Center, Asan Medical Center

Mar. 2019 - Date: Professor, Department of Orthopaedic Surgery

Asan Medical Center, University of Ulsan College of Medicine, Seoul, Korea

Mar. 2013 – Feb. 2013 : Associate Professor, Department of Orthopaedic Surgery, Scoliosis Center Asan Medical Center, University of Ulsan College of Medicine, Seoul, Korea

Mar. 2009 – Feb. 2013: Assistant Professor, Department of Orthopaedic Surgery, Scoliosis Center Asan Medical Center, Seoul, Korea

Mar. 2008 – Feb. 2009: visiting fellowship for spinal surgery.

Thomas Jefferson University Hospital, Rothman Institute, Philadelphia, USA

May. 2006 – Feb. 2008 : fellowship for spinal surgery.

Asan Medical Center, University of Ulsan, Korea.

May. 2005 – Apr. 2006 : fellowship for spinal surgery

### Seoul National University Hospital, Korea

Mar. 2002 – Apr. 2005 : Military duties

Nov. 2003 - Apr. 2005: Medical Officer, Armed Forces Capital Hospital, Korea

Apr. 2003 - Oct. 2003: Medical Officer, Peace Keeping Operations, United Nations, Western Sahara

Mar. 1998 – Feb. 2002: Resident.

Seoul National University Hospital, Korea

Mar. 1997 – Feb. 1998: Intern.

Seoul National University Hospital, Korea

#### Referees:

Professor of Orthopaedic Department, Thomas Jefferson University Hospital, Rothman Institute : Dr. Alexander R. Vaccaro

Professor of Orthopaedic Department, Washington University in St. Louis: Dr. Lawrence G. Lenke

Professor of Orthopaedic Department, Asan Medical Center, University of Ulsan: Dr. Choon Sung Lee

Professor of Orthopaedic Department, Seoul National University Hospital: Dr. Choon Ki Lee

## Peer reviewed scientific publication:

- 1. Surface topography using 3-dimensional whole body scanner in patients with scoliosis. J Adv spine Surg, 4:1-7, 2014.
- 2. Relationship between the type and amount of physical activity and low back pain in Koreans aged 50 years and older. PM R, [Epub ahead of print], 2014.
- 3. Feasibility of instrumentation only in congenital scoliosis. Neurosurg, 74:35-41, 2014.
- 4. Causes and Clinical manifestations of cauda equina syndrome. J Korean Soc Spine Surg, 20:204-210, 2013.
- 5. Effects of transforaminal balloon treatment in patients with lumbar foraminal stenosis: a randomized, controlled, double-blind trial. Pain Physician, 16:213-214, 2013.
- 6. Evaluation of the efficacy of Escherichia coli-derived recombinant human bone morphogenetic protein-2 in a minipig spinal anterior interbody fusion model. Bone Joint J, 95-B:217-223, 2013.
- 7. Analysis of sagittal spinal alignment in 181 asymptomatic children. J Spinal Disord Tech, 25:E259-263, 2012.
- 8. Direct repair of the pars interarticularis defect in spondylolysis. J Spinal Disord Tech, [Epub ahead of print], 2012.
- 9. Effectiveness of the Charleston night-time bending brace in the treatment of adolescent idiopathic scoliosis. J Pediatr Orthop, 32:368-372, 2012.
- 10. The effect of a mismatched center of rotation on the clinical outcomes and flexion-extension range of motion: Lumbar total disk replacement using Mobidisc at a 5.5-year follow-up. J Spinal Disord Tech, [Epub ahead of print], 2012.
- 11. Neglected esophageal perforation after upper thoracic vertebral fracture. Spine J, 11:1146-1151, 2011.
- 12. CT scan assessment of the pathway of the true lateral approach for transforaminal endoscopic lumbar discectomy. J Bone Joint Surg Br, 93:1395-1399, 2011.

- 13. Minimum five-year follow-up results of skipped pedicle screw fixation for flexible idiopathic scoliosis. J Neurosurg Spine, 15:146-150, 2011.
- 14. Optimal entry points and trajectories for cervical pedicle screw placement into subaxial cervical vertebrae. Eur Spine J, 20:905-911, 2011.
- 15. Fusion rates of instrumented lumbar spinal arthrodesis according to surgical approach. A systematic review of randomized trials. Clin Orthop Surg, 3:39-47, 2011.
- 16. Laminar closure after classic hirabayashi open-door laminoplasty. Spine, 36:E1634-1640, 2011.
- 17. A novel method of screw placement for extremely small thoracic pedicles in scoliosis. Spine, 36:E1112-1116, 2011.
- 18. A treatment guideline for neuropathic pain. J Korean Soc Spine Surg, 18:246-253, 2011.
- 19. Immunogenicity of osteogenic protein 1: results from a prospective, randomized, controlled, multicenter pivotal study of uninstrumented lumbar posterolateral fusion. J Neurosurg Spine, 13:484-493, 2010.
- 20. Changes of deformity due to position and anesthesia in adolescent idiopathic scoliosis. J Spinal Disord Tech, 23:377-382, 2010.
- 21. Prevalance and risk factor of degenerative disease of adjacent segment after anterior cervical arthrodesis. J Korean Soc Spine Surg, 17:1-6, 2010.
- 22. Recurrence rate of lumbar disc herniation after open discectomy in active young men. Spine, 34(1):24-9, 2009.
- 23. A prospective consecutive study of instrumented posterolateral lumbar fusion using synthetic hydroxyapatite (Bongros-HA) as a bone graft extender. J Biomed Mater Res A, 90:804-810, 2009.
- 24. Immunogenicity of bone morphogenetic proteins. J Neurosurg Spine, 10:443-451, 2009.
- 25. Early-onset facioscapulohumeral muscular dystrophy: Significance of pelvic extensor in sagittal spinal imbalance. J Pediatr Orthop B, 18:325-329, 2009.
- 26. Risk factors for adjacent segment disease after lumbar fusion. Eur Spine J, 18:1637-1643, 2009.
- 27. Herpes zoster confused with radiculopathy. J Korean Orthop Assoc, 43:405-412, 2008.
- 28. A Novel Concept for the Best Coronal Alignment of Pedicle Screws in Multilevel Lumbar Posterior Instrumentation: A Technical Note. J Korean Spine Surg, 15:96-101, 2008.
- 29. Scoliosis correction with thoracic pedicle screws: Posteroanterior C arm rotation method. J Korean Orthop Assoc, 42:98-105, 2007.
- 30. A comparative experimental study of allograft and porous hydroxyapatite as bone substitutes. J Korean Orthop Assoc, 42:545-552, 2007.
- 31. A radiographic analysis of sagittal spinal alignment for the standardization of standing lateral position. J Korean Orthop Assoc, 40:861-868, 2005.
- 32. The management of bone defects in revision total knee arthroplasty. J Korean Orthop Assoc, 37:197-203, 2002.
- 33. Multiple osseous metastasis from retroperitoneal paraganglioma A case report. J Korean Bone Joint Tumor Soc, 7:126-131, 2001.
- 34. Malignant tumors of the foot and ankle. J Korean Soc Foot Surg, 5:74-81, 2001.