

Kang-Woo Lee

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Position

- 2023-Present **Postdoctoral Researcher**, *GIST, Mechanical Engineering.*
- 2020-2023 **Postdoctoral Research Associate**, *Yonsei University, College of Dentistry, Division of Anatomy & Developmental Biology, Department of Oral Biology.*
- 2015-2020 **Teaching Assistant**, *Yonsei University, College of Dentistry, Division of Anatomy & Developmental Biology, Department of Oral Biology.*

Education

- Aug 2019 **Ph.D.**, Department of Applied life Science, *Yonsei University, Thicknesses of the facial skin and subcutaneous tissue using three-dimensional scanning, Committee: Kyung-seok Hu(advisor)*
- Feb 2011 **B.S.**, Physics, *Incheon University*

Research Papers

Journal Publications

Anatomy Research with Ultrasonography and Deep Learning

- **Lee KW**, Lee HJ, Hu H, Kim HJ. "Analysis of facial ultrasonography images based on deep learning." *Scientific Reports*. 2022 Oct 1;12(1):16480.

Anatomy Research with Ultrasonography and 3D Scan Data

- Choi YJ, We YJ, Lee HJ, **Lee KW**, Gil YC, Hu KS, Tansatit T, Kim HJ. "Three-Dimensional Evaluation of the Depressor Anguli Oris and Depressor Labii Inferioris for Botulinum Toxin Injections." *Aesthetic Surgery Journal*. 2021 May 18;41(6):NP456-NP461.
- Cho Y, Lee HJ, **Lee KW**, Lee KL, Kang JS, Kim HJ. "Ultrasonographic and Three-Dimensional Analyses at the Glabella and Radix of the Nose for Botulinum Neurotoxin Injection Procedures into the Procerus Muscle." *Toxins*. 2019 Sep 24;11(10):560.
- **Lee KW**, Kim SH, Gil YC, Hu KS, Kim HJ. "Validity and reliability of a structured-light 3D scanner and an ultrasound imaging system for measurements of facial skin thickness." *Clinical Anatomy*. 2017 Oct;30(7):878-886.

Anatomy Research with Ultrasonography

- Hormazabal-Peralta A, **Lee KW**, Lee HJ, Choi YJ, Hu KS, Kim HJ. "Clinical anatomy considerations on the muscular and vascular components of the midface by ultrasonographic imaging." *Clinical Anatomy*. 2021 Nov;34(8):1142-1149.

- Choi YJ, **Lee KW**, Gil YC, Hu KS, Kim HJ. "Ultrasonographic Analyses of the Forehead Region for Injectable Treatments." *Ultrasound in Medicine and Biology*. 2019 Oct;45(10):2641-2648.
- Lee HJ, Choi YJ, **Lee KW**, Hu KS, Kim ST, Kim HJ. "Ultrasonography of the internal architecture of the superficial part of the masseter muscle in vivo." *Clinical Anatomy*. 2019 Apr;32(3):446-452.

Anatomy Research with 3D Scan Data

- **Lee KW**, Yoon JH, Kim JS, Hu KS, Kim HJ. "Three-dimensional topography of facial soft tissues for the safer and effective threading procedures." *Clinical Anatomy*. 2021 Oct;34(7):1050-1058.
- Lee HJ, **Lee KW**, Tansatit T, Kim HJ. "Three-Dimensional Territory and Depth of the Corrugator Supercilii: Application to Botulinum Neurotoxin Injection." *Clinical Anatomy*. 2020 Jul;33(5):795-803.
- Kim YS, **Lee KW**, Kim JS, Gil YC, Tansatit T, Shin DH, Kim HJ. "Regional thickness of facial skin and superficial fat: Application to the minimally invasive procedures." *Clinical Anatomy*. 2019 Nov;32(8):1008-1018.

Sports Performance Analysis Research with Ultrasonography

- Lee HJ, **Lee KW**, Takeshi K, Lee YW, Kim HJ. "Correlation analysis between lower limb muscle architectures and cycling power via ultrasonography." *Scientific Reports*. 2021 Mar 8;11(1):5362.
- Lee HJ, **Lee KW**, Lee YW, Kim HJ. "Correlation between Cycling Power and Muscle Thickness in Cyclists." *Clinical Anatomy*. 2018 Sep;31(6):899-906.

Gross Anatomy Research

- Lee JH, **Lee KW**, Yi KH, Lee HJ. "Anatomical analysis of the intramuscular distribution patterns of the levator scapulae and the clinical implications for pain management." *Surgical and Radiologic Anatomy*. 2023 Jul;45(7):859-864.
- **Lee KW**, Choi YJ, Lee HJ, Gil YC, Kim HJ, Tansatit T, Hu KS. "Classification of unusual insertion of the pectoralis minor muscle." *Surgical and Radiologic Anatomy*. 2018 Dec;40(12):1357-1361.
- Lee HJ, Choi YJ, **Lee KW**, Kim HJ. "Positional Patterns Among the Auriculotemporal Nerve, Superficial Temporal Artery, and Superficial Temporal Vein for use in Decompression Treatments for Migraine." *Scientific Reports*. 2018 Nov 8;8(1):16539.
- Gil YC, **Lee KW**, Chang DY, Park SH, Kim HJ, Kim HM. "Positional relationship between the pectoralis major and external abdominal oblique muscles for consideration during dual-plane breast augmentation." *Clinical Anatomy*. 2018 Apr;31(3):339-346.

Presentations

- 2023 **Lee KW**, Kim HJ, Hu KS. "Statistical Shape Modeling and Facial Reconstruction using Multinational Data." Podium presentation at the 66th annual meeting of Korean Association of Physical Anthropologists

- 2021 **Lee KW**, Hu KS. "Constructing Three-Dimensional Color Human Model - Employment of *Visible Human Project*." Podium presentation at the 71th annual meeting of Korean Association of Anatomists.
- 2020 **Lee KW**, Lee JH, Ahn HS, Hormazabal-Peralta A, Hu KS, Kim HJ. "Creating 3D Cadaver Models Without a 3D Scanner Using Photogrammetry." Podium presentation at the 70th annual meeting of Korean Association of Anatomists.
- 2019 **Lee KW**, Kim YS, Kim JS, Gil YC, Tansatit T, Shin DH, Kim HJ. "Regional Thickness of Facial Skin and Superficial Fat: Application to the Minimally Invasive Procedures." Poster presentation at 15th Congress of the European Association of Clinical Anatomy.
- 2018 **Lee KW**, Park HJ, Tansatit T, Kim HJ." Submental Artery Passing the Mandibular Border and Its Clinical Implications." Podium presentation at 8th Asia Pacific International Congress of Anatomists.
- 2017 **Lee KW**, Kim SH, Gil YC, Hu KS, Kim HJ. "Validation and reliability of a structured light scanner and ultrasound imaging system in facial skin thickness measurement." Poster presentation at 13th Congress of the European Association of Clinical Anatomy.
- 2016 **Lee KW**, Choi YJ, Seo Kyle, Kim HJ, Hu KS. "Classification of Unusual the Insertion of The Pectoralis Minor Muscle." Poster presentation at 33rd American Association of Clinical Anatomists.