Dr. Won Moon is the Founder of the Moon Principles Institute ("the MoonLab") and a Co-founder of BioTech Innovation. He served as the Thomas R. Bales Endowed Chair in Orthodontics for the orthodontic residency program at UCLA School of Dentistry (2013-2020), and he currently holds two academic positions: Full-Professorship at Ajou University, and Adjunct Professorship at Forsyth Institute. He has been a Diplomate of the American Board of Orthodontics since 2002. He completed his dental education at Harvard and orthodontic education at UCLA. He studied mathematics prior to dentistry, and his research topics include 3D image analysis utilizing surface mapping functions and Elliptical Fourier's Descriptors, Genomewide Association Study of Cranofacial Phenotypes, Finite Element Model (FEM) Development and Simulation, Applications of 3D Printing in Orthodontics, Orthopedic Correction, Airway Changes with Orthopedic Corrections, Accelerated Tooth Movement, Micro-implant (MI) Design study, Digital Workflow, and Aligner System Development.

His work has been published in various journals, not necessarily limited to orthodontics because of his physical science background, and he is a co-author of six textbooks. He has presented these findings in 37 countries, totaling over 450 presentations. He received multiple research grants during his tenure at UCLA, including the Groundbreaking Research Project Grant Award in 2014. Besides the numerous research and presentation awards over the years, he has received the ‘Faculty of the Year Award’ more times than anyone at UCLA Orthodontic Program, and he was the recipient of the "Lifetime Achievement and Faculty Dedication Excellence Award" in 2019. His current focus has been establishing protocols for orthopedic corrections with MI, improving the airway for patients with nasal obstruction, creating virtual patients utilizing image analysis and FEM, and developing a novel Moon Aligner System.

His interest in mid-facial expansion began in 2004 as micro-implant became available in the USA, and he is responsible for developing Maxillary Skeletal Expander (MSE), a unique micro-implant assisted rapid palatal expander (MARPE). He has been active in advocating non-surgical skeletal expansion in both children and adult patients, especially for those who may suffer from airway restrictions. His presentation in MSE has been widely accepted internationally, and numerous peer-reviewed publications are available.
**LAB WORK**

Soldered arms to the molar bands are intended as a guide for proper MSE placement.

Even if the Mid-Palatal suture line is not in the middle, MSE must be placed vertically from the Mid-Line of the maxilla.

**INSERTION M.I.**

* (Manual Driver), MHD = SEB
* (Manual Driver), RW

The inventor recommends to use the manual driver for placing M.I. Because You can feel insertion torque and Bi-Cortical engagement as well.

If you use motor driver, You can’t feel insertion torque and bi-cortical engagement.

Please don’t insert the TAO too tightly because MSE body will be bent by strong pressures or forces.

**ACTIVATION PROTOCOL**

Caution: There could be situation when the hexagonal nut is not able to turn by the activation key in this case, stop activation for max 3 weeks for bone regeneration.

**MSE II**

- Early teens: 6/week (0.8mm/mm/week)
- Late teens: 2X/day (0.32mm/day)
- Early to Mid-20’s: 4-6X/day (0.53-0.89mm/day)
- Older: 4-4.5X/day
- After Biostimu: 2X/day (0.22mm/day)

6 Turns = 1.8mm (1 revolution)
56 MSE II = 12 weeks to expand 12mm, Max, 90 rounds