# Dong Yun Lee, PH.D.

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# **Academic Background:**

2005	PhD, Materials Science and Engineering, GIST, Korea
2000	MS, Biochemistry, Hanyang University, Korea
1998	BS, Biochemistry, Hanyang University, Korea

### **Professional Career:**

2021 – Present	Founder & CEO, Elixir Pharmatech Inc., Korea
2009 – Present	Professor. Bioengineering, Hanyang University, Korea
2019 – Present	Adjunct Professor. College of Pharmacy, University of Utah, USA
2018 - 2019	Visiting Research Scholar, University of Utah, USA
2017 - 2018	Department Chair, Bioengineering, Hanyang University, Korea
2007 - 2009	Post-doc. Joslin Diabetes Center, Harvard Medical School, USA
2005 - 2007	Post-doc. College of Pharmacy, Seoul National University, Korea

#### HONORS AND AWARDS

2022 7th ENF Creative Innovation Award, The Korean Society of Industrial and Engineering Chemistry (KSIEC)

(제 7 회 이엔에프 창의혁신상, 한국공업화학회)

- 2021Mid-Career Scientist Award, The Korean Society for Biomaterials (KSBM)(시지바이오 중견연구자상, 한국생체재료학회)
- 2018Commendation of Prime Minister Award, Korea Government(2018 년 '국가연구개발 성과평가 유공포상' 국무총리 표창, 대한민국정부)
- 2018 National R&D Excellence Achievement 100-selected Award, Korea (2018 년 국가연구개발 우수성과 100 선 (최우수 성과 12 선), 과학기술정보통신부)
- 2018 Mid-Career Scientist Award, The Polymer Society of Korea (PSK) (중견학술상, 한국고분자학회)
- 2018 Excellence Award in a Contest for Bio-Industry by Chungju Diabetes Bio Promotion Foundation

(충주 당뇨바이오 진흥재단 공모전 우수상)

JPI Paper Award, Korean Society of Pharmaceutical Science and Technology (KSPST) (JPI 논문상, 한국약제학회)

- 2016 HYU Outstanding Research Scientist, Hanyang University (신진연구자상, 한양대학교)
- 2014 HYU Outstanding Research Scientist, Hanyang University (신진연구자상, 한양대학교)

#### Research Area:

Biomaterials, Tissue Engineering, Cell & Gene Therapy, Oral Drug Delivery System, Biosensor

# **Selected Publications (Recent 5 year):**

- 1. Lia Priscilla, et al, Immunotherapy Targeting the Obese Adipose Tissue Microenvironment: Focus on non-communicable diseases, **Bioactive Materials**, **35**, **461-476** (2024)
- 2. Kim H.S. et al, Aurozyme: A Revolutionary Nanozyme in Colitis, Switching Peroxidase-like to Catalase-like Activity, **Small**, **2302331 (2023)**
- 3. Kim H.S. et al., Inhibition of DAMP actions in the tumoral microenvironment using lactoferrin-glycyrrhizin conjugate for glioblastoma therapy, **Biomaterials Research**, 27, Article number 52 (2023)
- 4. Kang D.K. et al, A Local Water Molecular-heating Strategy for Near-Infrared Long-lifetime Imaging-guided Photothermal Therapy of Glioblastoma, Nature Communications, 14, Article number 2755 (2023)
- 5. Hwang H.H. et al, Gastrointestinally absorbable lactoferrin-heparin conjugate with anti-angiogenic activity for treatment of brain tumor, **Journal of Controlled Release**, 355, 730-744 (2023)
- 6. Jeon H.J. et al., Nanozyme-based colorimetric biosensor with a systemic quantification algorithm for noninvasive glucose monitoring, **Theranostics**, 12(14), 6308-6338 (2022)
- 7. Jang S.B. et al, DAMP-modulating nanoparticle for successful pancreatic islet and stem cell transplantation, **Biomaterials**, 287, Article number 121679 (2022)
- 8. Kim M.J. et al, Inhibition of HMGB1 release by heme oxygenase-1 gene delivery for immunomodulation of transplanted pancreatic islet, **Journal of Controlled Release**, 343, 326-337 (2022)
- 9. Kim H.S. et al, A novel therapeutic strategy of multimodal nanoconjugates for state-of-the-art brain tumor phototherapy, **Journal of Nanobiotechnology**, **20**, **14** (2022)
- 10. Kim H.S. et al, Milk protein-shelled gold nanoparticle with gastrointestinally active absorption for aurotherapy to brain, **Bioactive Materials**, **8**, **35-48** (2022)
- 11. Jeon H.J. et al, Optical Assessment of Tear Glucose by Smart Biosensor based on Nanoparticle Embedded Contact Lens, Nano Letters, 21(20), 8933-8940 (2021)
- 12. Kim M. et al, Novel Enzymatic Crosslinking-based Hydrogel Nanofilm Caging System on Pancreatic β-cell Spheroid for Long-term Blood Glucose Regulation, Science Advances, 7(26), eabf7832 (2021)
- 13. Park S. et al, Cerium Oxide Nanoparticle-Containing Colorimetric Contact Lenses for Noninvasively Monitoring Human Tear Glucose, **ACS Applied Nano Materials**, 4(5), 5198-5210 (2021)
- 14. Kang NY et al., Multimodal imaging probe development for pancreatic b-cells: from fluorescence to PET, **Journal of the American Chemical Society**, **142(7)**, **3430-3439 (2020)**

- 15. Jin S.M. et al., Multi-layer surface modification of islets for magnetic resonance imaging using ferumoxytol, **Biomaterials**, 214, 119224 (2019)
- 16. Kim S.J. et al., Hydrogels with an embossed surface: An all-in-one platform for mass production and culture of human adipose-derived stem cell spheroids, **Biomaterials**, 188, 198-212 (2019)