

**Dong Yun Lee, PH.D.**  
Professor  
Department of Bioengineering  
Hanyang University, Seoul, Republic of Korea



CEO & Founder  
Elixir Pharmatech Inc., Seoul, Republic of Korea

### **Address**

222 Wangsimni-ro, Seongdong-gu, Seoul 04763, Republic of Korea  
Phone: 82 (2) 2220-2348  
Fax: 82 (2) 2220-4741  
E-mail: [dongyunlee@hanyang.ac.kr](mailto:dongyunlee@hanyang.ac.kr)

### **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 – 2020       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**

2023    특별승급, Hanyang University  
2022    7th ENF Creative Innovation Award, The Korean Society of Industrial and Engineering Chemistry (KSIEC)  
(제 7 회 이엔에프 창의혁신상, 한국공업화학회)  
2021    Mid-Career Scientist Award, The Korean Society for Biomaterials (KSBM)  
(시지바이오 중견연구자상, 한국생체재료학회)  
2018    Commendation of Prime Minister Award, Korea Government  
(2018 년 ‘국가연구개발 성과평가 유공포상’ 국무총리 표창, 대한민국정부)  
2018    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)  
2018    JPI Paper Award, Korean Society of Pharmaceutical Science and Technology

(KSPST)

(JPI 논문상, 한국약제학회)

2018 특별승진, Hanyang University

2016 HYU Outstanding Research Scientist, Hanyang University

(신진연구자상, 한양대학교)

2014 특별승진, Hanyang University

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. Kim H.S. et al, Aurozyme: A Revolutionary Nanozyme in Colitis, Switching Peroxidase-like to Catalase-like Activity, **Small (IF 15.153) 2302331 (2023)**
2. Kim H.S. et al., Inhibition of DAMP actions in the tumoral microenvironment using lactoferrin-glycyrrhizin conjugate for glioblastoma therapy, **Biomaterials Research (IF 15.863), 27, Article number 52 (2023)**
3. Kang D.K. et al, A Local Water Molecular-heating Strategy for Near-Infrared Long-lifetime Imaging-guided Photothermal Therapy of Glioblastoma, **Nature Communications (IF 17.694), 14, Article number: 2755 (2023)**
4. Hwang H.H. et al, Gastrointestinally absorbable lactoferrin-heparin conjugate with anti-angiogenic activity for treatment of brain tumor, **Journal of Controlled Release (IF 11.467), 355, 730-744 (2023)**
5. Jeon H.J. et al., Nanozyme-based colorimetric biosensor with a systemic quantification algorithm for noninvasive glucose monitoring, **Theranostics (IF 11.6), 12(14), 6308-6338 (2022)**
6. Jang S.B. et al, DAMP-modulating nanoparticle for successful pancreatic islet and stem cell transplantation, **Biomaterials (IF 15.304), 287, 121679 (2022)**
7. 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 (IF 11.467), 343, 326-337 (2022)**
8. Kim H.S. et al, A novel therapeutic strategy of multimodal nanoconjugates for state-of-the-art brain tumor phototherapy, **Journal of Nanobiotechnology (IF 9.429), 20, 14 (2022)**
9. Kim H.S. et al, Milk protein-shelled gold nanoparticle with gastrointestinally active absorption for aurotherapy to brain, **Bioactive Materials (IF 16.874), 8, 35-48 (2022)**
10. Jeon H.J. et al, Optical Assessment of Tear Glucose by Smart Biosensor based on Nanoparticle Embedded Contact Lens, **Nano Letters (IF 12.262), 21(20), 8933-8940 (2021)**
11. Kim M. et al, Novel Enzymatic Crosslinking-based Hydrogel Nanofilm Caging System on Pancreatic  $\beta$ -cell Spheroid for Long-term Blood Glucose Regulation, **Science Advances (IF 14.957), 7(26), eabf7832 (2021)**
12. Park S. et al, Cerium Oxide Nanoparticle-Containing Colorimetric Contact Lenses for Noninvasively Monitoring Human Tear Glucose, **ACS Applied Nano**

- Materials (IF 6.104)**, 4(5), 5198-5210 (2021)
13. Kang NY et al., Multimodal imaging probe development for pancreatic b-cells: from fluorescence to PET, **Journal of the American Chemical Society (IF 16.308)**, 142(7), 3430-3439 (2020)
  14. Jin S.M. et al., Multi-layer surface modification of islets for magnetic resonance imaging using ferumoxytol, **Biomaterials (IF 15.304)**, 214, 119224 (2019)
  15. 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 (IF 15.304)**, 188, 198-212 (2019)