

Curriculum Vitae

이 윤 행 (Yun Haeng Lee) Ph. D.

직위: Postdoctoral Researcher

소속: 인천대학교 생명과학과 단백질공학실험실

E-mail: licdldbsgod@naver.com

☎ 010. 8871. 7692 (Mobile)

📍 주소: 서울특별시 동작구 여의대방로 44 길 10 (대림아파트) 111 동 801 호



Education

- | | |
|-----------|--|
| 2024. 02. | Incheon National University, Department of Life Science, Ph.D. |
| 2022. 02. | Incheon National University, Department of Life Science, MS |
| 2020. 02. | Incheon National University, 분자의생명전공, BS |

Career

- | | |
|---------------------|---|
| 2024. 03 - present | Postdoctoral researcher , Incheon National University, Department of Life Science, Protein Engineering Lab |
| 2022. 03 – 2024. 02 | Ph.D. course , Incheon National University, Department of Life Science, Protein Engineering Lab |
| 2020. 03 – 2022. 02 | M.S course , Incheon National University, Department of Life Science, Protein Engineering Lab |
| 2020. 03 – 2020. 12 | Teaching experiment classes at Incheon National University |
| 2015. 11 – 2017. 08 | R.O.K. Army , Korea (대한민국 육군 병장 만기 전역) |
| 2014. 03 – 2020. 02 | Undergraduate course , Incheon National University, Life Science |

Honors and Awards

- | | |
|----------|---|
| 2024. 10 | Best Poster Award, 16th International Symposium on Natural Sciences |
| 2023. 05 | Travel grant, International Conference 2023 (KSBMB) |
| 2022. 10 | Best Poster Award, 14th International Symposium on Natural Sciences |
| 2022. 05 | Travel grant, International Conference 2022 (KSBMB) |
| 2021. 05 | DAEWOONG Best Research Award, International Conference 2021 (KSBMB) |
| 2020. 12 | 2020 인천대를 빛낸, 인천대 학생, Incheon National University, Incheon, Korea |
| 2020. 10 | Best Poster Award, 12th International Symposium on Natural Sciences |

Publication (1st Author & Corresponding Author)

1. Park JH*, **Lee YH***, Lee KS, Lee YJ, Yoon JH, So B, Kim D, Kim M, Kwon HW, Byun Y, Lee KY†, **Park JT†** (Aug 22, 2025) ε-viniferin rejuvenates senescence via RGS16 regulation. (*: co-first author, †: co-corresponding author) **Pharmaceuticals** (2025 IF:4.8) 18(9) 1254
2. **Lee YH***, Lim H*, Kim G, Jang G, Kuk MU, Park JH, Yoon JH, Lee YJ, Kim D, So B, Kim M, Kwon HW, Byun Y†, Lee KY†, **Park JT†** (Apr 16, 2025) Elucidating the Role and Mechanism of Alpha-Enolase in Senescent Amelioration via Metabolic Reprogramming. (*: co-first author, †: co-corresponding author) **Cell proliferation** (2025 IF:5.9) 2025; 0:e70049
3. Park JH†, Jeong EY†, Kim YH†, Cha SY, Kim HY, Nam YK, Park JS, Kim SY, Lee YJ, Yoon JH, So B, Kim D, Kim M, Byun Y, **Lee YH***, Shin SS*, **Park JT*** (Apr 23, 2025) *Camellia sinensis* Extract Ameliorates Skin Aging by Reducing Mitochondrial ROS Production. (†: co-first author, *: co-corresponding author) **Pharmaceuticals** (2025 IF:4.8) 2025 18(5), 612
4. So B*, Park JH*, Kim MS, Lee H, Yoon JH, Lee YJ, Kim D, Kwon HW, Park J, Han T, **Lee YH†**, **Park JT†** (Apr 03, 2025) Rapid and Accurate Genotoxicity Assessment Using the Neutral Comet Assay in *Cyprinus carpio* Cells. (*: co-first author, †: co-corresponding author) **Life** (2025 IF:3.2) 15(4), 603
5. Kuk MU*, **Lee YH***, Kim D*, Lee KS, Park JH, Yoon JH, Lee YJ, So B, Kim MS, Kwon HW, Byun Y, Lee KY†, **Park JT†** (Feb 24, 2025) Sauchinone ameliorates senescence through reducing mitochondrial ROS production. (*: these authors contributed equally to this work, †: co-corresponding author) **Antioxidants** (2025 IF:6.0) 14(3): 259
6. **Lee YH***, Jeong EY*, Kim YH*, Park JH, Yoon JH, Lee YJ, Lee SH, Nam YK, Cha SY, Park JS, Kim SY, Byun Y†, Shin SS†, **Park JT†** (Jan 29, 2025) Identification of senescence rejuvenation mechanism of *Magnolia officinalis* extract including honokiol as a core ingredient. (*: these authors contributed equally to this work, †: co-corresponding author) **Aging** (2025 IF: 3.9) 17(2): 497–523
7. **Lee YH***, Kuk MU*, Park JH*, Lee H, Lee H, So MK, Yoon JH, Lee YJ, Kim DY, So BH, Kim MS, Park J, Han T†, **Park JT†** (Sep 05, 2024) Rapid and accurate ecotoxicological assessment of heavy metals using *Cyprinus carpio cells*. (*: these authors contributed equally to this work, †: co-corresponding author) **Life** (2024 IF: 3.2) 14(9): 1119
8. **Lee YH†**, So BH†, Lee KS, Kuk MU, Park JH, Yoon JH, Lee YJ, Kim DY, Kim MS, Kwon HW, Lee KY*, Byun Y*, **Park JT*** (Sep 04, 2024) Identification of cellular anti-senescence mechanism: regulatory of *RAC2* and *LINC00294* mediated by isoschaftoside. (†: these authors contributed equally to this work, *: co-corresponding author) **Molecules** (2024 IF: 4.2) 29(17): 4182
9. **Lee YH**, Kuk MU, So MK, Park HJ, Song ES, Park J, Yoon JH, Kwon HW, Choi J, **Park JT†** (Nov 28, 2023) Discovery of anticancer activity through chemical screening of *Polyporus ulleungus*. (†: co-corresponding author) **Journal of Cancer** (2023 IF: 4.2) 15(2):309-316
10. **Lee YH***, Kuk MU*, So MK, Song ES, Lee H, Ahn SK, Kwon HW†, **Park JT†**, Park SC† (Apr 13, 2023) Targeting Mitochondrial Oxidative Stress as a Strategy to Treat Aging and Age-related diseases. (†: co-corresponding author, *: these authors contributed equally to this work) **Antioxidants** (2023 IF: 7.0) 12:934

11. Lee YH, Kim M, Park HJ, Park JY, Song ES, Lee H, Ko G, Ahn S, Kwon HW, Byun Y, Kim C[†], Choi J[†], **Park JT**[†] (Nov 28, 2022) Chemical screening identifies the anticancer properties of *Polyporous parvovarius*. (†: co-corresponding author) ***Journal of Cancer*** (2022 IF: 4.2) 14(1):50-60
12. Lee YH, Park JY, Song ES, Lee H, Kuk MU, Joo JH, Roh H[†], **Park JT**[†] (Jun 25, 2022) Improvement of Sleeping Beauty transposon system enabling efficient and stable protein production. (†: co-corresponding author) ***Biotechnology and Bioprocess Engineering*** (2022 IF: 3.2) 27(3): 353-360
13. Lee YH^{*}, Choi D^{*}, Jang G, Park JY, Song ES, Lee H, Kuk MU, Joo JH, Ahn SK, Byun Y[†], **Park JT**[†] (Jan 30, 2022) Targeting regulation of ATP synthase 5 alpha/beta dimerization alleviates senescence. (†: co-corresponding author, *: these authors contributed equally to this work) ***Aging*** (2022 IF: 5.9) 14(2):678-707
14. Lee YH, Park JY, Lee H, Song ES, Kuk MU, Joo JH, Oh S, Kwon HW, **Park JT**[†], Park SC[†] (Nov 03, 2021) Targeting mitochondrial metabolism as a strategy to treat senescence. (†: co-corresponding author) ***Cells*** (2021 IF: 6.0) 10(11): 3003

1. Lee YJ*, Song ES*, **Lee YH**, Lee KS, So B, Park JH, Yoon JH, Kim D, Kim M, Kwon HW, Byun Y†, Lee KY†, **Park JT**† (Jun 02, 2025) Dehydroacteoside rejuvenates senescence via TVP23C-CDRT4 regulation. (*: co-first author, †: co-corresponding author) *Experimental Gerontology* doi.org/10.1016/j.exger.2025.112800
2. Kuk MU*, Kim D*, **Lee YH**, Yoon JH, Park JH, Lee YJ, So B, Kim MS, Kwon HW, Byun Y†, **Park JT**† (Nov 28, 2024) Synergistic ROS Reduction Through the Co-Inhibition of BRAF and p38 MAPK Ameliorates Senescence. (*: co-first author, †: co-corresponding author) *Antioxidants* 13(12): 1465
3. Kuk MU, So MK, Park JH, Yoon JH, Lee YJ, Kim D, So B, **Lee YH**, Kim M, Byun Y, Kwon HW†, **Park JT**† (Oct 03, 2024) ROSA26 BAC-based System Enables Continuous High-yield Protein Production. (†: co-corresponding author) *Biotechnology and Bioprocess Engineering* <https://doi.org/10.1007/s12257-024-00158-7>
4. Yoon JH*, Kim YH*, Jung EY†, **Lee YH**†, Byun Y, Shin SS†, **Park JT**† (Sep 14, 2024) Senescence rejuvenation through reduction of mitochondrial ROS generation by *Polygonum cuspidatum* extract. *: co-first author, †: co-second author †: co-corresponding author) *Antioxidants* 13(9): 1110
5. Song ES, **Lee YH**, So MK, Kuk MU, Park J, Yoon JH, Lee YJ, Kim D, So B, Byun Y, Kwon HW†, **Park JT**† (Mar 05, 2024) Establishment of a new promoter trapping vector using 2A peptide. (†: co-corresponding author) *Biotechnology and Bioprocess Engineering* 10.1007/s12257-024-00096-4
6. Song ES, So MK, Park HJ, Lee H, **Lee YH**, Kuk MU, Park J, Kwon HW, Choi J†, **Park JT**† (Jul 03, 2023) Chemical screening identifies the anticancer properties of *Polyporus tuberaster*. (†: co-corresponding author) *Journal of Cancer* 14(11): 2075-2084
7. Lee H, Song ES, **Lee YH**, Park JY, Kuk MU, Kwon HW, Roh H†, **Park JT**† (Feb 07, 2023) A novel hybrid promoter capable of continuously producing proteins in high yield. (†: co-corresponding author) *Biochemical and Biophysical Research Communications* 650: 103-108
8. Kuk MU, Lee H, Song ES, **Lee YH**, Park JY, Jeong S, Kwon HW, Byun Y†, Park SC†, **Park JT**† (Mar 01, 2023) Functional restoration of lysosomes and mitochondria through modulation of AKT activity ameliorates senescence. (†: co-corresponding author) *Experimental Gerontology* 173:112091
9. Kuk MU, Ga YJ, Kim YJ, Park JY, Song ES, Lee H, **Lee YH**, Ko G, Kim JK, Yeh JY, Kwon HW†, Byun YJ†, **Park JT**† (Nov 03, 2022) Metabolic reprogramming as a novel therapeutic target for Cocksackievirus B3. (†: co-corresponding author) *Animal Cells and Systems*, 26(6) 275–28
10. Park JY, Lee H, Song ES, **Lee YH**, Kuk MU, Ko G, Kwon HW†, Byun YJ†, **Park JT**† (Nov 15, 2022) Restoration of lysosomal and mitochondrial function through p38 MAPK inhibition ameliorates senescence. (†: co-corresponding author) *Rejuvenation Research* 25(6):291-299
11. Park JY, Lee H, Song ES, **Lee YH**, Kuk MU, Ko G, Byun YJ†, Kwon HW†, **Park JT**† (Dec 21, 2022) Improvement of Tol2 transposon system by modification of Tol2 transposase. (†: co-corresponding author) *Biotechnology and Bioprocess Engineering* 27(6): 987-994

12. Kuk MU, Park JY, Song ES, Lee H, Lee YH, Joo JH, Kwon HW[†], **Park JT**[†] (May 24, 2022) Bacterial artificial chromosome-based protein expression platform using the Tol2 transposon system. ([†]: co-corresponding author) *Biotechnology and Bioprocess Engineering* 27(3): 344-352
13. Kuk MU, Lee YH, Kim JW, Hwang SY, Park JY, Song ES, Kwon HW, Oh S, Park JT (Nov 21, 2021), Rapid and Efficient BAC Recombineering: Gain & Loss Screening System. *Biotechnology and Bioprocess Engineering* 26(6): 1023-1033
14. Kim JW, Lee YH, Kuk MU, Hwang SY, Kwon HW, **Park JT** (Nov 08, 2021) Cre/Lox-based RMCE for site-specific integration in CHO cells. *Biotechnology and Bioprocess Engineering* 26(5): 795-803
15. Hwang SY, Lee YH, Kuk MU, Kim JW, Oh S, **Park JT** (Nov 08, 2021) Improvement of Tol2 transposon system enabling efficient protein production in CHO cells. *Biotechnology and Bioprocess Engineering* 26(5): 767-775
16. Lee HJ, Stephen Depuydt, Shin KS, Choi SY, Kim GH, Lee YH, Park JT, Han TJ, Park JH (Jul 20, 2021), Assessment of various toxicity endpoints in duckweed (*Lemna minor*) at the physiological, biochemical, and molecular levels as a measure of diuron stress. *Biology* 10(7): 684
17. Kuk MU, Lee YH, Kim JW, Hwang SY, Park JT[†], Park SC[†] (Feb 17, 2021) Potential Treatment of Lysosomal Storage Disease Through Modulation of the Mitochondrial–Lysosomal Axis. ([†]: co-corresponding author) *Cells* 10: 420
18. Hwang SY, Kuk MU, Kim JW, Lee YH, Lee YS, Choy HE, Park SC, Park JT (Sep 17, 2020) ATM mediated-p53 signaling pathway forms a novel axis for senescence control. *Mitochondrion* 55:54-63

Patents (Registration)

1. **Lee YH**, Kim CM, Kim MK, Ahn CR, Yu YH, Ji WJ, Choi JH, Park JT (Oct 16, 2024), **(KOR)** 항암 활성을 가지는 폴리포르스 파보바리우스(*Polyporus parvovarius*) 균주, 등록번호: 제 10-2720148 호
2. **Lee YH**, Park JT (Feb 16, 2022), **(KOR)** 개선된 슬리핑 뷰티 트랜스포존 시스템 및 이를 이용한 유전자 전위 방법. 등록번호: 제 10-2365768 호

Patents (Application)

1. **Lee YH**, Park JH, Cha SY, Kim HY, Nham YK, Jung EY, Kim SY, Park JS, Kwon HY, 변영주, Shin SS, Park JT (Jul 31, 2025), (**KOR**) 세노몰픽 및 세놀리틱 효능을 갖는 하동작설 유래 역노화 조성물, 10-2025-0105474
2. **Lee YH**, Kim MS, Park JH, So BH, Lee HJ, Park JH, Han TJ, Park JT (Jul 25, 2025), (**KOR**) 버들봉어 세포를 이용한 독성물질의 유전독성 평가방법, 10-2025-0101173
3. **Lee YH**, So BH, Park JH, Kim MS, Lee HJ, Park JH, Han TJ, Park JT (Jul 25, 2025), (**KOR**) 민물고기 세포를 이용한 독성물질의 유전독성 평가방법, 10-2025-0101172
4. **Lee YH**, Kuk MU, Kim DY, Byun YJ, Park JT (Feb 27, 2025), (**KOR**) BRAF 억제제 및 p38 MAPK 억제제를 유효성분으로 포함하는 항노화 조성물, 출원 번호: 10-2025-0025992
5. **Lee YH**, Lee YJ, Kwon HW, Byun YJ, Kim YH, Lee SH, Cha SY, Nham YK, Jung EY, Kim SY, Park JS, Shin SS, Park JT (Jul 30, 2024), (**PCT**) 세포 노화 및 대사 기능 회복 효능을 갖는 후박나무 유래 역노화 조성물, 출원 번호: PCT/KR2024/015910
6. **Lee YH**, Byun YJ, Kwon HW, Park JT (Aug 28, 2024), (**PCT**) 옥사졸 유사체를 유효성분으로 포함하는 항노화 조성물, 출원번호: PCT/KR2024/012827
7. **Lee YH**, So MK, Kwon HW, Park JT (Aug 16, 2024), (**KOR**) 펩톤 및 FBS 를 포함하는 CHO 세포 배양용 DMEM 배지 조성물, 출원 번호: 10-2024-0109929
8. **Lee YH**, Kwon HW, Byun YJ, Im HW, Park JT (Aug 16, 2024), (**KOR**) 옥사졸 유도체를 유효성분으로 포함하는 항노화 조성물, 출원 번호: 10-2024-0110058
9. **Lee YH**, Kwon HW, Byun YJ, Im HW, Park JT (Aug 16, 2024), (**KOR**) 피라졸 유도체를 유효성분으로 포함하는 항노화 조성물, 출원 번호: 10-2024-0109860
10. **Lee YH**, Lee YJ, Kwon HW, Byun YJ, Kim YH, Lee SH, Cha SY, Nham YK, Jeong EY, Kim SY, Park JS, Shin SS, Park JT (Jul 30, 2024), (**KOR**) 세포 노화 및 대사 기능 회복 효능을 갖는 후박나무 유래 역노화 조성물, 출원 번호: 10-2024-0100729
11. **Lee YH**, Park JT, So BH, Kwon HW, Byun YJ, Lee KY (Apr 29, 2024), (**KOR**) 이소샤프토사이드를 유효성분으로 포함하는 항노화 조성물. 출원 번호: 10-2024-0056806
12. **Lee YH**, Kwon HW, Byun YJ, Park JT (Aug 29, 2023), (**KOR**) 옥사졸 유사체를 유효성분으로 포함하는 항노화 조성물. 출원 번호: 10-2023-0113722
13. **Lee YH**, Park JT, Park JY, Han TJ, Park JH, Lee HJ (Mar 14, 2023), (**KOR**) 민물고기 세포의 증식 특성을 이용한 생태독성 평가방법. 출원 번호: 10-2023-0033166
14. **Lee YH**, Kuk MU, Kwon HY, Byun YJ, Park JT (Jul 29, 2022), (**KOR**) AKT 저해제를 포함하는 미토파지 활성화 방법. 출원번호: 10-2022-0095033
15. **Lee YH**, Byun YJ, Choi DY, Park JT (Feb 07, 2022), (**USA**) PHARMACEUTICAL COMPOSITION FOR TREATING OR PREVENTING AGING OR AGE-RELATED DISEASES, 출원번호: 17/633,576

16. Lee YH, Kim CM, Kim MK, Ahn CR, Yu YH, Ji WJ, Lim YU, Choi JH, Park JT (Feb 14, 2022), (**KOR**) 항암 활성을 가지는 폴리포루스 올롱구스 균주 출원번호: 10-2022-0018938
17. Lee YH, Byun YJ, Choi DY, Park JT (Jul 23, 2021), (**PCT**) Chemical screening identifies the regulation of mitochondrial cristae formation as a target for alleviating senescence, 출원번호: PCT/KR2021/009592
18. Lee YH, Byun YJ, Choi DY, Park JT (Feb 18, 2021), (**KOR**) 세포노화 관련 질병의 예방 또는 치료용 약학적 조성물, 출원번호: 10-2021-0022067
19. Lee YH, Park JT (DEC 07, 2020), (**PCT**) Improved productivity of Sleeping Beauty transposon in CHO cell. 출원번호: PCT/KR2020/017709

Poster Presentation

1. **Lee YH**, Park JT (2025) Elucidating the mechanism of improving aging through selective death of senescent cells. *International Conference 2025*, May 20 ~ May 23, 2025, FAOBMB
2. **Lee YH**, Park JT (2024) Identifying senolytics effect of KB2779 as an anti-senescence amelioration. 16th International Symposium on Natural Sciences, Oct 10 ~ Oct 11, 2024, Research Institute of Basic Sciences, INU
3. **Lee YH**, Park JT (2024) Identifying senolytics effect of KB2779 as an anti-senescence amelioration. *International Conference 2024*, May 28 ~ May 30, 2024, KSBMB
4. **Lee YH**, Ahn SK, Park JT (2023) Identification of senescence rejuvenation and metabolic reprogramming by alpha-enolase regulation. 15th International Symposium on Natural Sciences, Oct 30 ~ Oct 31, 2023, Research Institute of Basic Sciences, INU
5. **Lee YH**, Kuk MU, Park J, Ahn SK, Park JT (2023) (**Oral presentation in EN**) Identification of senescence rejuvenation and metabolic reprogramming by alpha-enolase regulation. The 40th Spring Conference of the Korean Society for Gerontology & Korea-Japan Joint Symposium, Jul 13 ~ Jul 15, 2023, The Korean Society For Gerontology.
6. **Lee YH**, Ahn SK, Park JT (2023) Identification of senescence rejuvenation and metabolic reprogramming by alpha-enolase regulation. international Conference 2023, May 10 ~ May 13, 2023, KSBMB
7. **Lee YH**, **Park JT** (2022) Development of cell lines of freshwater fish species and evaluation of ecotoxicity, 제 18 회 대한 독성 유전·단백체 학회 국제 학술대회, Oct 25 ~ Oct 27 2022, 대한독성유전·단백체학회
8. **Lee YH**, Ahn SK, Park JT (2022) Discovery of anticancer substances in fungal extracts through high throughput screening Anticancer activities in the ethanol extracts of *Polyporus*. 14th International Symposium on Natural Sciences, Oct 6 ~ Oct 7, 2022, Research Institute of Basic Sciences, INU
9. **Lee YH**, Ahn SK, Park JT (2022) Discovery of senomorphic compounds using high-throughput screening. 14th International Symposium on Natural Sciences, Oct 6 ~ Oct 7, 2022, Research Institute of Basic Sciences, INU
10. **Lee YH**, Ahn SK, Park JT Discovery of anticancer substances in fungal extracts through high throughput screening Anticancer activities in the ethanol extracts of *Polyporus*. international Conference 2022, May 23 ~ May 26, 2022, KSBMB
11. **Lee YH**, Park JT (2021) Discovery of anticancer substances in fungal extracts through high throughput screening. 13th International Symposium on Natural Sciences, Oct 6, 2021, Research Institute of Basic Sciences, INU
12. **Lee YH**, Park JT (2021) Targeting regulation of ATP synthase 5 alpha/beta dimerization alleviates senescence. 13th International Symposium on Natural Sciences, Oct 6, 2021, Research Institute of Basic Sciences, INU
13. **Lee YH**, Park JT (2021) Improved productivity of Sleeping Beauty transposon in CHO cell. 13th International Symposium on Natural Sciences, Oct 6, 2021, Research Institute of Basic Sciences, INU

14. **Lee YH**, Park JT (2021) Improved productivity of Sleeping Beauty transposon in CHO cell. international Conference 2021, May 25 ~ May 27, 2021, KSBMB
15. **Lee YH**, Park JT (2020) Improved productivity of Sleeping Beauty transposon in CHO cell. 12th International Symposium on Natural Sciences, Oct 9, 2020, Research Institute of Basic Sciences, INU
16. **Lee YH**, Park JT (2020) Improved productivity of Sleeping Beauty transposon in CHO cell. international Conference 2020, Sep 21 ~ Sep 23, 2020, KSBMB