



## YOUNG-MOK YANG

PROFESSOR

DEPT. OF PATHOLOGY  
(HUMAN GENETICS LAB),  
SCHOOL OF MEDICINE

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### Educations

- 1983 B.S., Konkuk University, Seoul, Korea
- 1986 M.S., Konkuk University, Seoul, Korea
- 1992 Ph.D., Konkuk University, Seoul, Korea

### Professional Background

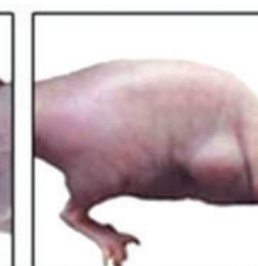
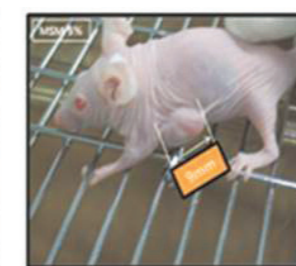
- 2015- Present Editorial Board Membership (Editor): International Journal of Oncology
- 2004-Present Professor: Department of Pathology (Human Genetics Lab), Medical School, Konkuk University
- 2011-2014 Editorial Board Membership (Editor): Chinese Journal of Clinicians (International), Chinese Medical Association
- 1999-2004 Associate Professor: Department of Pathology (Human Genetics Lab), College of Medicine, Konkuk University
- 1997-1999 Exchange Professor (Visiting fellow): NCI, NHLBI, NIH, USA
- 1995-1999 Assistant Professor: Department of Premedical Course, College of Medicine, Konkuk University
- 1993-1995 Instructor: College of Medicine, Konkuk University
- 1990-1993 Lecturer: College of Natural Science, College of Medicine, Konkuk University
- 1988-1991 Teaching Assistant: Pre-Medical Course, College of Medicine Konkuk University
- 1984-1992 Lecturer of Special lecture of Japanese: Chung-Ju Campus, Konkuk University
- 1983-1986 Teaching Assistant: Pre-Medical Course, College of Natural Science, Konkuk University

### Top 5 Publications

- Lim EJ, Hong DY, Park JH, Joung YH, Darvin P, Kim SY, Na YM, Hwang TS, Ye SK, Moon ES, Cho BW, Park KD, Lee HK, Park TK, **Yang YM**. Methylsulfonylmethane Suppresses Breast Cancer Growth by Down-Regulating STAT3 and STAT5b Pathways. PLoS One (2012.04)
- Park JH, Darvin P, Lim EJ, Joung YH, Hong DY, Park EU, Park SH, Choi SK, Moon ES, Cho BW, Park KD, Lee HK, Kim MJ, Park DS, Chung LM, **Yang YM**. Hwanggeumchal sorghum Induces Cell Cycle Arrest, and Suppresses Tumor Growth and Metastasis through Jak2/STAT Pathways in Breast Cancer Xenografts. PLoS One (2012.07)
- Joung YH, Lim EJ, Darvin P, Chung SC, Jang JW, Park KD, Lee HK, Kim HS, Park TK, **Yang YM**. MSM Enhances GH Signaling via the Jak2/STAT5b Pathway in Osteoblast-Like Cells and Osteoblast Differentiation through the Activation of STAT5b in MSCs. PLoS One (2012.10)
- Darvin P, Joung YH, Nipin S P, Kang DY, Byun HJ, Hwang DY, Cho KH, Park KD, Lee HK, **Yang YM**. Sorghum polyphenol suppresses the growth as well as metastasis of colon cancer xenografts through co-targeting jak2/STAT3 and PI3K/Akt/mTOR pathways. J Funct Foods 15 (2015)
- Nipin SP, Darvin P, Yoo YB, Joung YH, Kang DY, Kim DN, Hwang TS, Kim SY, Kim WS, Lee HK, Cho BW, Kim HS, Park KD, Park JH, Chang SH, **Yang YM**. The combination of methylsulfonylmethane and tamoxifen inhibits the Jak2/STAT5b pathway and synergistically inhibits tumor growth and metastasis in ER-positive breast cancer xenografts. SP et al. BMC Cancer 15 (2015)

## RESEARCH INTERESTS

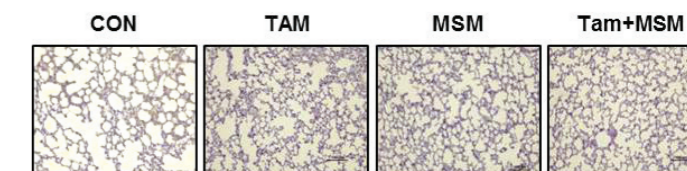
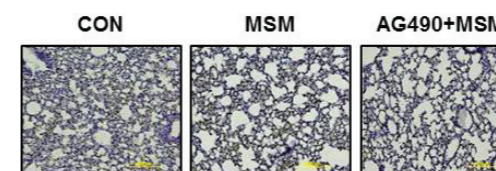
### 1. Therapeutic Mechanism on Breast Cancer Using Natural Products



MSM suppressed the growth of human breast cancer xenograft in mice. Image of tumor-xenografted nude mice model at the end of the treatment.

HSE suppressed the growth of human breast cancer xenograft in mice. Image of tumor-xenografted nude mice model at the end of the treatment.

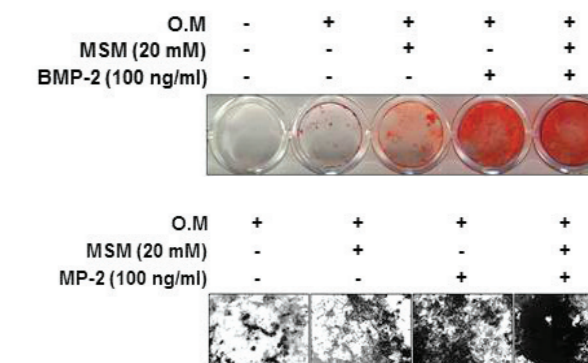
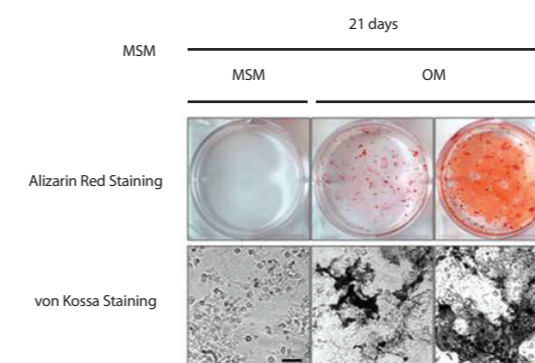
### 2. Treatment of Cancer Using Combination Therapy with Natural Substances



Combination of AG490 and MSM inhibits lung metastasis in nude mice. Histological sections showing inhibition of lung metastasis.

Combination of Tamoxifen and MSM Inhibits pulmonary metastasis in vivo. Metastatic animal model showing the lung metastasis analysis for the Tam, MSM, drug combination-treated, or vehicle-treated controls.

### 3. Enhancement of Osteoblast & Osteoclast Differentiation by Natural Substance



Effects of methylsulfonylmethane (MSM) on osteoblast differentiation in primary murine bone marrow mesenchymal stem cells (MSCs). Osteoblastic mineralization was determined by Alizarin Red S staining (A) and von Kossa staining (B).

A combination of MSM on BMP-2 enhanced osteoblast differentiation in primary mesenchymal stem cells (MSCs). Osteoblastic mineralization was determined by Alizarin Red S staining (A) and von Kossa staining (B).