Youngman Oh, PhD

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Education

Graduate Education

1989 - 1993 PhD, Cancer Biology Stanford University, Stanford, CA

1985 - 1987 MS, Biology, Eastern Michigan University, Ypsilanti, MI

Undergraduate Education

1977 - 1984 BS, Biology, Summa cum Laude, Korea University, Seoul

Virginia Commonwealth University & Medical Center Appointments

2003 - present	Professor, Department of Pathology, VCU
2008 - present	Member, Virginia Bio-Technology Research Park's Leadership Council
2004 - present	Professor, Integrative Life Sciences Program, VCU
2008 - present	Cancer and Metabolic Syndrome Research Lab., VCU
2003 - present	Professor, Dept. of Biochemistry and Molecular Biology, VCU
2003 - present	Member Scientist, Massey Cancer Center, VCU
2003 - present	Graduate Faculty of the School of Graduate Studies, VCU

Professional Service

2013 - present	Virginia Commonwealth University Cancer and Metabolism Research Group, Steering Committee
2013 - present	Virginia Commonwealth University Obesity Research Group
2013 - present	Virginia Commonwealth University Obesity and Breast Cancer Research Interest Group
2015 - present	Ad hoc scientific reviewer of the Pathophysiology and Complications Section for the Endocrine Society Annual Meeting

Editorial Advisory Boards

2010 - present	American Journal of Physiology-Endocrinology and Metabolism
2012 - present	Annals of Pediatric Endocrinology and Metabolism
2013 - present	Endocrinology and Metabolism

Recent Grants

2023-2025 Development of Prolastin-C liquid -IGFBP-3R Agonistic antibody as a targeted therapy for colon cancer (Grifols Investigator Sponsored Research Award) (PI)

2023-2025 A novel targeted antibody therapy for triple-negative breast cancer (Virginia Innovation Partnership Corporation Commonwealth Commercialization Fund) (PI)

2022-2023 Development of TMEM219 mAb as a targeted therapy for TNBC (VCU Commercialization Fund) (PI)

2021-2023 Development of humanized TMEM219 agonistic mAbs (VCU Massey Cancer Center) (PI)

2020-2025 Targeting Transglutaminase 2 in cancer cachexia (R01CA251405, NIH/NCI) (Co-I)

2020-2025 StarD5, a protein that translocates cholesterol to the plasma membrane, a novel target for colon cancer. (VA Merit Grant) (Co-I)

Recent Invited Presentations

Invited speaker, " Targeted Therapy for Colon Cancer through the Alpha-1 Antitrypsin-IGFBP-3 Axis" The 16th Annual World Cancer Congress, Budapest, Hungary, June 2024.

Invited speaker, Development of AAT-IGFBP-3R Agonist as a targeted therapy for CAC therapy" Investigator-Sponsored Research Programs Forum, Grifols Zoom Meeting, March 2023.

Invited speaker, "Use of TMEM219 agonists for the treatment of cancer, metabolic syndrome, obstructive respiratory disorders and related diseases" TechConnect World Innovation Conference & Expo, Washington, DC, June 2022.

Invited speaker, “Development of therapeutic TMEM219 agonistic antibody” Molecule to Medicine Focused Interactive Group Meeting, Massey Cancer Center, Virginia Commonwealth University, Richmond, Virginia, May 2022.

Recent Publications

Peer Reviewed Publications

Allam SJ; Mahesh M; Cai Q; Oh Y. The Mechanistic role of insulin-like growth factor binding protein-3 (IGFBP-3) in diabetic retinopathy and dry eye disease. Biomed J Sci & Tech Res, 2025:62(3). BJSTR. MS.ID.009754.

Yajaman DR; Oh Y; Trvino JG; Harrell JK. Advancing antibody-drug conjugates: Precision oncology approaches for breast and pancreatic cancers. Cells, 2025;17(11):1792. doi: 10.3390/cancers17111792. PMID: 40507272; PMCID: PMC12153706.

Kwon A, Chae HW, Lee WJ, Kim J, Kim YJ, Ahn J, **Oh Y**, Kim HS. Insulin-like growth factor binding protein-3 induces senescence by inhibiting telomerase activity in MCF-7 breast cancer cells. Sci Rep. 2023;30;13(1):8739. doi: 10.1038/s41598-023-35291-5. PMID: 37253773; PMCID: PMC10229562.

Cai Q; Kim M; Harada A; Idowu MO; Sundaresan G; Zweit J; **Oh Y**. Alpha-1 antitrypsin inhibits tumorigenesis and progression of colitis-associated colon cancer through suppression of inflammatory neutrophil-activated serine proteases and IGFBP-3 proteolysis. Int J Mol Sci, 2022;23(22):13737. doi: 10.3390/ijms232213737, PMID: 36430216 PMCID: PMC9698049.

Kim SY; Zhao Y; Kim H; **Oh Y**; Xu Q. Sodium iodate-induced retina degeneration observed in non-separate sclerochoroid/ retina pigment epithelium/retina whole mounts. Ann Eye Sci, 2022;7:3 https://dx.doi.org/10.21037/aes-21-27.

Kim SY; Kim Y; **Oh Y**. Inflammatory pathways in pathological neovascularization in retina and choroid: a narrative review on the inflammatory drug target molecules in retinal and choroidal neovascularization. Ann Eye Sci, 2021;6:24 https://dx.doi.org/10.21037/aes-21-4.

Book Chapters

Walker GE; Kim H-S; Yang Y-F; **Oh Y**. IGF-independent effects of the IGFBP Superfamily. In "Insulin-like Growth Factor" Le Roith D, Zumkeller W, Baxter R, eds, Landes Bioscience, 2004. Chapter 28.

Werner H; **Oh Y**; Roberts CT Jr. Apoptosis in breast cancer. In "Programmed Cell Death Volume II: Role in Disease, Pathogenesis and Prevention" Mattson MP, Estus S, Rangnekar V, eds, "Advances in Cell Aging and Gerontology " Elsevier Science, Netherlands, 2001, vol. 6:1-22.

Minniti G; **Oh Y**. Insulin-like growth factor binding proteins in endocrine-related neoplasia. In "Endocrine Oncology' Ethier SP, ed, "Contemporary Endocrinology" Humana Press, NJ 2000, vol. 17:215-236.