

Title: *De novo* cancer-initiating cells in gastric carcinogenesis

Eunyoung Choi, Ph.D.

Assistant Professor
Epithelial Biology Center
Section of Surgical Sciences
Vanderbilt University Medical Center, USA

2213 Garland Ave.,
10435F, MRB4

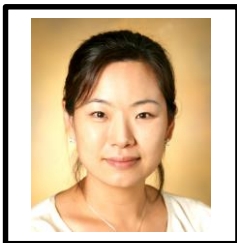
Nashville, TN, 37232, USA

Email: eunyoung.choi@vumc.org | Tel: | 1-615-322-0775

Web: <https://lab.vanderbilt.edu/choilab/>

Abstract: Dysplasia has been generally recognized as the greatest risk of cancer development in many types of epithelial cancers. Although the evolution of dysplasia to adenocarcinoma is of paramount importance for understanding the full spectrum of carcinogenesis, stem cell populations leading the malignant transformation of dysplastic cell lineages into cancer cells have not been defined. Dr. Choi's lab focuses on cellular and functional mechanisms involved in carcinogenic transformation of pre-cancerous cells during gastric carcinogenesis using *in vitro* organoid and *in vivo* animal models. The lab recently identified dysplastic stem cells that might be a principal source of the carcinogenic transformation into gastric adenocarcinoma and critical targets for intervention in the early induction of gastric cancer as well.

Bio



Dr. Choi is an investigator who has broad research training experiences in stem/progenitor cell biology and gastric cancer biology. She has established a novel driver mouse model and *in vitro* organoid model systems for studying the cell plasticity and mechanisms of biological process in gastric carcinogenesis. She was a recipient of two career development awards in 2017, DOD Cancer Research Program Career Development Award and Debbie's Dream Foundation-AACR Career Development Award for Gastric Cancer Research. Dr. Choi received the NIH/NCI Outstanding MERIT Award which provides longer term grant support to early-stage investigators (ESIs) in 2019 and also is the recipient of the AGA-R. Robert & Sally Funderburg Research Award in Gastric Cancer this year. The Funderburg award in particular is the most prestigious award for gastric cancer research given in the United States.