

## Researcher Information Form

**Name: Joan Garrett**

**Department/Division/College:**

Pharmacy

**Room/Address:**

Medical Sciences Building Room 3207  
Cincinnati, OH 45267-0514

**Phone: 513-558-0741**

**Email: joan.garrett@uc.edu**

**Research Interest (1-2 Sentences):** My research has focused primarily on understanding HER family signaling in breast cancer and how the HER family is involved in resistance to targeted therapeutics. A current research project addresses how naturally occurring HER3 mutations affect innate (or primary) response to HER2 inhibitors, and if mutant HER3 variants increase tumor susceptibility to HER3 or PI3K inhibitors.

**Unique Resources/Techniques:** Collaboration with Pharmaceutical Companies and access targeted therapies in ongoing clinical trials

**Representative Publications (5 Maximum, May use Hyperlink):**

Mishra R, Alanazi S, Yuan L, Solomon T, Thaker TM, Jura N, Garrett JT. [Activating HER3 mutations in breast cancer](#). *Oncotarget*. 2018 Jun 12;9(45):27773-27788. doi: 10.18632/oncotarget.25576. eCollection 2018 Jun 12. PMID: PMC6021238.

Mishra R, Patel H, Alanazi S, Yuan L, Garrett JT. [HER3 signaling and targeted therapy in cancer](#). *Oncol Rev*. 2018 Jan 30;12(1):355. doi: 10.4081/oncol.2018.355. eCollection 2018 Jan 30. PMID: PMC6047885.

Mishra R, Hanker AB, Garrett JT. [Genomic alterations of ERBB receptors in cancer: clinical implications](#). *Oncotarget*. 2017 Dec 26;8(69):114371-114392. doi: 10.18632/oncotarget.22825. eCollection 2017 Dec 26. Review. PMID: PMC5768410.

Hanker AB, Garrett JT, Estrada MV, Moore PD, Ericsson PG, Koch JP, Langley E, Singh S, Kim PS, Frampton GM, Sanford E, Owens P, Becker J, Groseclose MR, Castellino S, Joensuu H, Huober J, Brase JC, Majjaj S, Brohée S, Venet D, Brown D, Baselga J, Piccart M, Sotiriou C, Arteaga CL. [HER2-Overexpressing Breast Cancers Amplify FGFR Signaling upon Acquisition of Resistance to Dual Therapeutic Blockade of HER2](#). *Clin*

Cancer Res. 2017 Aug 1;23(15):4323-4334. doi: 10.1158/1078-0432.CCR-16-2287. PMID: PMC5540793.

Schwarz LJ, Fox EM, Balko JM, Garrett JT, Kuba MG, Estrada MV, González-Angulo AM, Mills GB, Red-Brewer M, Mayer IA, Abramson V, Rizzo M, Kelley MC, Meszoely IM, Arteaga CL. [LYN-activating mutations mediate antiestrogen resistance in estrogen receptor-positive breast cancer.](#) J Clin Invest. 2014 Dec;124(12):5490-502. doi: 10.1172/JCI72573. Epub 2014 Nov 17. PMID: PMC4348968