

SCIENTIFIC PUBLICATIONS (H-index 75; Citations 57,000)

- 1) Kostic L, Leung C, Murad KA, Kancheva S, Perna S, Lee B & Barker N (2024). Lgr5 Marks Stem/Progenitor Cells Contributing to Epithelial and Muscle Development in the Esophagus. **Nat Commun**, in revision
- 2) Wang Y, Qu M, Wang J, Shi N, Guo H, Xue Y & Barker N (2024). Circadian regulation of cancer stem cell and tumor microenvironment interplay: key players in metastasis. **Nat. Cancer**, 5:546
- 3) Aiderus A, Barker N & Tergaonkar V (2023). Serrated colorectal cancer: pre-clinical models and molecular pathways. **Trends Cancer Res**, 10:76
- 4) Alvina FB, Chen T C-Y, Lim HYG & Barker N (2023). Gastric epithelial stem cells in development, homeostasis, and regeneration. **Development**, 150(18):dev2014
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- 7) Lim HYG & Barker N (2023). Sox9, A Key Regulator of Gastric Stem Cell Behavior Driving Cancer Initiation. **Gastroenterology** 164:1052
- 8) Xue Y, San Luis B, Dress R, Murad KB, Ginhoux F, Barker N* & Lane, DP* (2023). Proteasome inhibitor bortezomib stabilizes and activates p53 in hematopoietic stem/progenitors and double negative T cells *in vivo*. **Proc Natl Acad Sci U S A**. 28;120 *Co-Corresponding Authors
- 9) Gasnier M, Lim HYG & Barker N (2023). Role of Wnt signaling in the maintenance and regeneration of the intestinal epithelium, **Curr Top Dev Biol**. 153:281
- 10) Lim HYG, Swathi Y & Barker N (2022). Targeted ablation of Lgr5-expressing intestinal stem cells in diphtheria toxin receptor (DTR)-based mouse and organoid models. **STAR Protoc**, 3: 101411
- 11) Wei LHX, Liu C, Volpe G , Zhuang Z, Zou X, Wang Z, Pan T, Yuan Y, Zhang X, Fan P, Guo P, Liu X, Yu F, Shangguan S, Lei Y, Lai Y, Deng Q, Liu Y, Wu L, Shi Q, Yu H, Huang Y, Lu H, Wang B, Cheng M, Xu J, Liu Y, Wang M, Wang C, Zhang Y, Yu Y, Wong CW, Lai G, Xu S, An J, Ward C, Isern J, Feng L, Liu Y, Guo X, Maxwell P, Barker N, Muñoz-Cánores P, Gu Y, Mulder J, Uhlen M, Liu S, Yang H, Wang J, Hou J, Xu X, Esteban MA & Liu L. (2022). Single-cell transcriptomic atlas of the adult non-human primate Macaca fascicularis. **Nature**, 604:723
- 12) Fatehullah A, Terakado Y, Sagiraju S, Tan TL, Sheng T, Tan SH, Murakami K, Swathi Y, Ming T, Tan P & Barker N (2021) A Tumour-Resident Lgr5+ Stem Cell Pool is Essential for Establishment and Progression of Advanced Gastric Cancers. **Nat Cell Biol**, 23:1299
- 13) Lim HYG, Kostic L & Barker N (2021). Organoid systems for recapitulating the intestinal stem cell niche and modelling disease *in vitro*. **Advances in Stem Cells and their Niches**, in press

- 14) Lim HYG & *Barker N* (2021). A key malignant switch in skin SCC. **Nat Cancer**, 2:1116
- 15) Murakami K, Terakado Y, Saito K, Jome Y, Takeda H, Oshima M and *Barker N* (2020). A Genome-Scale CRISPR screen reveals novel factors regulating Wnt-dependent renewal of mouse gastric epithelial cells. **Proc Natl Acad Sci**, 18:e2016806118
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- 23) Seishima R & *Barker N* (2019) A contemporary snapshot of intestinal stem cells and their regulation. **Differentiation**, 108:3
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 - 31) Vincan E, Schwab RHM, Flanagan DJ, Moselen JM, Tran BM, Barker N & Phesse TJ (2018) The central role of Wnt signaling and organoid technology in personalizing anticancer therapy. Book Chapter in **PMBTS WNT Signaling**, 153:299
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 - 35) Fatehullah A, Tan SH & Barker N (2016) Organoids as an *in vitro* model for studying human development and disease. **Nat Cell Biol**, 18:246
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 - 37) Tan, SH & Barker, N (2015) Stemming colorectal cancer growth and metastasis: HOXA5 forces cancer stem cells to differentiate. **Cancer Cell**, 28:683
 - 38) Ng A, & Barker N (2015) Ovary and fimbrial stem cells: biology, niche and cancer origins. **Nat Rev Mol Cell Biol** 16:625
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