

STATEMENT ON PUBLISHED MATERIAL

This Dissertation contains material that has been and will be published in scientific journals.

Chapter II contains text and figures of the following prepared review article:

Pratt SJP, Hernandez-Ochoa EO, Martin SS (2020). Calcium signaling: breast cancer's approach to manipulation of cellular circuitry.

Drafted the manuscript: SJPP. Prepared figures: SJPP and EOH. Revised manuscript: SJPP, EOH, and SSM. All authors read and approved the final manuscript.

Chapter III contains text and figures of the following published review article:

Pratt SJP, Lee RM, Martin SS (2020). The mechanical microenvironment in breast cancer (review article). *Cancers*, 12, 1452.

Drafted the manuscript and prepared figures: SJPP. Revised manuscript: SJPP, RML, and SSM. All authors read and approved the final manuscript.

Chapter IV contains text and figures of the following published manuscript:

Pratt SJP, Hernandez-Ochoa EO, Lee RM, Ory EC, Lyons JS, Joca HC, Johnson A, Thompson K, Bailey P, Lee CJ, Mathias T, Vitolo MI, Trudeau M, Stains JP, Ward CW, Schneider MF, Martin SS (2018). Real-time scratch assay reveals mechanisms of early calcium signaling in breast cancer cells in response to wounding. *Oncotarget*, 9(38), 25008-25024. DOI: 10.18632/oncotarget.25186. Featured Cover Image.

Conception and design: SJPP, EOH, JPS, CWW and SSM. Acquisition of data: SJPP. Analysis and interpretation: SJPP, EOH, RML, ECO, JSL, HCJ, AJ, KT, PB, CJL, TM, MIV, MT, JPS, CWW, MFS and SSM. Drafted the manuscript: SJPP. Revised manuscript: SJPP, EOH, RML, ECO, JSL, HCJ, AJ, KT, PB, CJL, TM, MIV, MT, JPS, CWW, MFS and SSM. All authors read and approved the final manuscript.

Chapter V contains text and figures of the following prepared manuscript:

Pratt SJP, Lee RM, Hernandez-Ochoa EO, Ory EC, Thompson KN, Bailey PC, Mathias TJ, Ju JA, Vitolo MI, Schneider MF, Stains JP, Ward CW, Martin SS (2020). Mechanoactivation of NOX2-generated ROS elicits persistent TRPM8 Ca²⁺ signals that are inhibited by oncogenic KRas.

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