

Western University

Scholarship@Western

Inspiring Minds – Showcasing Western’s Graduate Research, Scholarship and Creative Activity

September 2021

The Seed of Life

Chidambra D. Halari

Western University, chalari@uwo.ca

Follow this and additional works at: <https://ir.lib.uwo.ca/inspiringminds>

Citation of this paper:

Halari, Chidambra D., "The Seed of Life" (2021). *Inspiring Minds – Showcasing Western’s Graduate Research, Scholarship and Creative Activity*. 149.

<https://ir.lib.uwo.ca/inspiringminds/149>

“The Seed of Life”

As one must prepare a fertile soil to grow a healthy plant from a seed, so does nature prepare the mother’s uterus for her egg to grow into a healthy baby. As the seed develops new roots to draw nutrients from the soil, the egg makes a new organ called the “placenta” which invades the uterus to draw nourishment for the baby. If the uterus is not ready, the placenta invades poorly, leading to a poorly grown baby and serious maternal disease called preeclampsia.

Our lab has discovered many molecules that controls placental invasion, one of them called ‘decorin’. An overproduction of decorin by the uterus impairs baby’s development and makes the placenta sick. Fortunately, we discovered that increased level of decorin in mom’s blood can predict preeclampsia before the symptoms appear. We hope to design therapies to cure preeclampsia and save the developing baby or this “seed of life”.