

Building Tissues to Understand how Tissue Build Themselves

Zev J. Gartner¹

The capacity of cells to self-organize into tissues is critical to their normal developmental and their ability to self-repair. Thus, a better understanding of how tissues self-organize will improve our ability to build tissues and organs in the lab, and suggest new strategies to slow the breakdown of tissue structure that contributes to the initiation and progression of disease. We are working to understand the mechanisms used by cells to self-organize robustly by measuring the properties of individual cells, then linking these properties to collective behaviors in tissues. We focus on self-organizing programs in the breast and gut, and how these programs are susceptible to the perturbations that underlie diseases such as cancer.

Acknowledgements: This work was funded by NIH grant XX00000. This footnote is optional.

¹Department of Systems Biology, University of Quantitative Biology, Other address information. E-mail: author@place.edu

²Mathematical Biology Center, BioPark USA. E-mail: two@place.gov

³Another Dept, Another Institution, Address, E-mail: three@place.com