

# Sharon M. Donovan

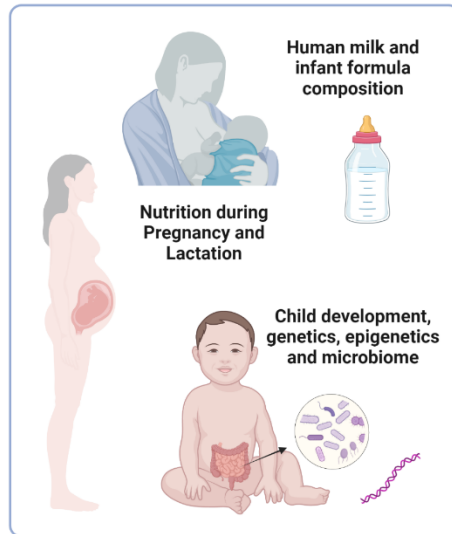
Professor and Melissa M. Noel Endowed Chair in Nutrition and Health  
Director of the Personalized Nutrition Initiative

Department of Food Science & Human Nutrition  
[Affiliate Research Page](#)

Email: [sdonovan@illinois.edu](mailto:sdonovan@illinois.edu)

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The first 1,000 days of life, spanning from conception until age 2, are of critical importance to short- and long-term health outcomes for infants and children. During this phase of life, proper nutrition is of key importance for supporting growth and developmental outcomes and is an optimal time for personalized/ precision nutrition.



## Research Interests

- Development of the gut microbiome and gut-brain-microbiome axis
- Genetic, microbiome and environmental determinants of childhood obesity
- Nutritional regulation of intestinal and cognitive development of neonates
- Bioactive components in human milk

## Current Projects

- STRONG Kids 2 longitudinal birth cohort study (NIH R01 DK138032)  
<https://www.familyresiliency.illinois.edu/strong-kids-program>
- Nutritional predictors of intestinal maturation in the preterm infant. (NIH R01 HD112396)
- Human milk oligosaccharides and bioactive proteins on infant development

## Keywords

First 1000 days, pediatrics, human milk, personalized nutrition, microbiome, childhood obesity, neurocognitive development

## Interest Areas for Collaboration/Future Work

Dr. Donovan seeks collaboration with data scientists to apply machine learning to data sets emerging from the STRONG Kids 2 cohort, including dietary intake, growth trajectories, health outcomes, and 'omic analyses. (microbiome, epigenome, and single nucleotide polymorphisms).