Area of Expertise:

- Molecular and Cellular Biology
- Broiler adipose tissue physiology
- Broiler nutrition
- Appetite regulation in broilers

Focus of Research:

- Role of appetite-regulating peptides in adipose tissue development and physiology in broilers and Japanese quail
- Identifying mechanisms through which neuropeptide Y and alpha-melanocyte stimulating hormone affect appetite and adipose tissue development in broilers
- Understanding how neuropeptides affect appetite regulation in broilers and quail
- Identifying novel regulators of appetite and adiposity in chickens
- Determining effects of dietary macronutrient composition (source and quantity of fat and protein) on appetite regulation and adipose tissue physiology in broilers
- Role of epigenetic regulation of gene expression in stress-induced appetite regulation in chickens from lines selected for low or high body weight.

Current Funded Projects (Source):

- Mechanisms of Neuropeptide Y's Effects on Adipose Tissue Deposition in Chickens (USDA)
- The effects of dietary fat quantity and α-melanocyte stimulating hormone on appetite regulatory mechanisms and adiposity in broiler chickens (John Lee Pratt Animal Nutrition Program)
- Effects of dietary macronutrient composition and exogenous neuropeptide Y on appetite regulation and adipose tissue development in broiler chickens (John Lee Pratt Animal Nutrition Program)