Key questions defining research program:

- How does genetic variation contribute to obesity, diabetes, & dyslipidemia?
- How and where is fat stored and why?
- How does lipid metabolism influence energy homeostasis and vice versa?
- How can we prevent and treat obesity and its complications such as diabetes, fatty liver disease, cardiovascular disease, reproductive disease, and cancer?
- How does the body sense and respond to nutritional and environmental stress?

Key words describing research program:

- Obesity and its complications – pathophysiology, prevention, and treatment
- Diabetes
- Dyslipidemia
- Adipose tissue
- Glucose and fat metabolism

Titles for shovel-ready research projects:

- Understanding a novel human obesity-risk variant and its role in obesity and diabetes pathogenesis
- Understanding how tissue-specific fat metabolism contributes to the metabolic syndrome, lipodystrophy, and adipose tissue function
- Improving the prevention and treatment of human with severe hypertriglyceridemia who are at risk for acute/recurrent pancreatitis
- Understanding the role of a novel human obesity-risk variant in energy homeostasis, adipose tissue biology, and/or behavior
- Using clinical informatics to improve prevention and treatment of obesity, diabetes, and dyslipidemia

Data sources for shovel-ready research projects:

- Pubmed, papers published by Kershaw and colleagues
- Existing Human Data sets with comprehensive metabolic phenotyping of human subjects
- Cell, animal tissue, and human tissue and blood repositories
- Clinical informatics databases