

Services provided by the Hormone Assay & Analytical Services Core

Expand

## Radioimmunoassays (RIA)

- ACTH, aldosterone, corticosterone, cortisol, c-peptide, ghrelin, glucagon, growth hormone, insulin, leptin, progesterone, PYY, testosterone, T3 and T4

## High Performance Liquid Chromatography (HPLC)

- amino acids, catecholamines (epinephrine & norepinephrine), creatinine, and purine nucleotides

## Luminex multiplex assays

- human and mouse adipokine, cytokine/chemokine, metabolic hormones, IGF, immunology/inflammation, and pituitary assays

## ELISA

- glucagon

## Enzymatic

- glucose

[Click here for more information](#)

## Publications / Citations

1. [Insulin Delivery Into the Peripheral Circulation: A Key Contributor to Hypoglycemia in Type 1 Diabetes](#). Gregory JM, Kraft G, Scott MF, Neal DW, Farmer B, Smith MS, Hastings JR, Allen EJ, Donahue EP, Rivera N, Winnick JJ, Edgerton DS, Nishimura E, Fledelius C, Brand CL, Cherrington AD (2015) *Diabetes* **64(10)**: 3439-51  
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2. [Acute effects of hyperinsulinemia and hyperglycemia on vascular inflammatory biomarkers and endothelial function in overweight and obese humans](#). Perkins JM, Joy NG, Tate DB, Davis SN (2015) *Am J Physiol Endocrinol Metab* **309(2)**: E168-76  
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3. [Tissue inflammation and nitric oxide-mediated alterations in cardiovascular function are major determinants of endotoxin-induced insulin resistance](#). House LM, Morris RT, Barnes TM, Lantier L, Cyphert TJ, McGuinness OP, Otero YF (2015) *Cardiovasc Diabetol* : 56  
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4. [Effects of Antecedent GABA A Receptor Activation on Counterregulatory Responses to Exercise in Healthy Man](#). Hedrington MS, Tate DB, Younk LM, Davis SN (2015) *Diabetes* **64(9)**: 3253-61  
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5. [Chronic overeating impairs hepatic glucose uptake and disposition](#). Coate KC, Kraft G, Shiota M, Smith MS, Farmer B, Neal DW, Williams P, Cherrington AD, Moore MC (2015) *Am J Physiol Endocrinol Metab* **308(10)**: E860-7  
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6. [Counterregulatory responses to hypoglycemia differ between glimepiride and glyburide in non diabetic individuals](#). Joy NG, Tate DB, Davis SN (2015) *Metabolism* **64(6)**: 729-37  
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7. [Effects of Acute and Antecedent Hypoglycemia on Endothelial Function and Markers of Atherothrombotic Balance in Healthy Humans](#). Joy NG, Tate DB, Younk LM, Davis SN (2015) *Diabetes* **64(7)**: 2571-80  
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8. [Human islet preparations distributed for research exhibit a variety of insulin-secretory profiles](#). Kayton NS, Poffenberger G, Henske J, Dai C, Thompson C, Aramandla R, Shostak A, Nicholson W, Brissova M, Bush WS, Powers AC (2015) *Am J Physiol*

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9. [Interleukin-6 amplifies glucagon secretion: coordinated control via the brain and pancreas](#). Barnes TM, Otero YF, Elliott AD, Locke AD, Malabanan CM, Coldren AG, Brissova M, Piston DW, McGuinness OP (2014) *Am J Physiol Endocrinol Metab* **307(10)**: E896-905  
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## MeSH Terms

Acetaminophen Acyltransferases Adiposity Administration, Intravenous Adolescent Adult Aged Alleles Alprazolam  
Amino Acid Motifs Amino Acids Amino Acid Sequence Amino Acid Transport System ASC AMP-Activated Protein Kinases Animals  
Antidiuretic Hormone Receptor Antagonists Apolipoprotein B-100 Arabidopsis Proteins Arousal Arterial Pressure Autoantigens  
Autonomic Nervous System Base Sequence Basic Helix-Loop-Helix Transcription Factors Bicycling Binding Sites Biocatalysis  
Biological Transport Biomarkers Blood Glucose Blood Pressure Body Composition Body Weight Brain C-Peptide Calcium Signaling  
Cardiac Output Catalysis Catalytic Domain Cation Transport Proteins Cell Line Cell Line, Tumor Cell Nucleus Cells, Cultured  
Chemokine CCL2 Child Child Development Disorders, Pervasive Chloramphenicol O-Acetyltransferase Chlorocebus aethiops Chromatin  
Chromosomes Chromosomes, Human, Pair 17 Chronic Disease Cloning, Molecular Consciousness Conserved Sequence COS Cells  
Cricetinae Cyclic AMP Cyclic GMP Diabetes Mellitus Diabetes Mellitus, Experimental Diabetes Mellitus, Type 1 Diabetes Mellitus, Type 2  
Diet, Fat-Restricted Diet, High-Fat Dietary Carbohydrates Dietary Fats Digestive System Disease Models, Animal DNA  
DNA, Complementary DNA-Binding Proteins DNA Mutational Analysis Dogs Dose-Response Relationship, Drug Eating Echocardiography  
Electrophoresis, Polyacrylamide Gel Endothelium, Vascular Endothelium-Dependent Relaxing Factors Energy Metabolism  
Enhancer Elements, Genetic Enteral Nutrition Enzyme Activators Epidermal Growth Factor Epinephrine Escherichia coli Estradiol  
Estrogen Receptor alpha Estrogens Exenatide Exercise Eye Proteins Fasting Fatty Liver Female Fibrinolysis Fructose  
G-Protein-Coupled Receptor Kinases GABA-A Receptor Agonists Gastric Emptying Gene Deletion Gene Expression  
Gene Expression Regulation Gene Expression Regulation, Enzymologic Genes, Reporter Glucagon Glucagon-Like Peptide-1 Receptor  
Glucagon-Secreting Cells Glucokinase Gluconeogenesis Glucose Glucose-6-Phosphatase Glucose-6-Phosphate  
Glucose Clamp Technique Glucose Intolerance Glucose Tolerance Test Glyburide Glycerol Glycogen Glycogenolysis  
Glycogen Phosphorylase Glycogen Synthase Glycolysis GTP-Binding Protein alpha Subunits, Gq-G11 Heart HeLa Cells Hemodynamics  
Hepatocyte Nuclear Factor 1 Hepatocyte Nuclear Factor 3-alpha Hepatocyte Nuclear Factor 3-beta Hepatocytes Heterozygote  
Homeodomain Proteins Hormones Human Growth Hormone Humans Hydrocortisone Hyperglycemia Hyperinsulinism Hyperphagia  
Hypoglycemia Hypoglycemic Agents Inflammation Inflammation Mediators Infusions, Intravenous Insulin Insulin-Secreting Cells  
Insulin Lispro Insulin Receptor Substrate Proteins Insulin Resistance Insulins Insulin Secretion Interleukin-6 Introns Islets of Langerhans  
Kinetics Lactic Acid Large Neutral Amino Acid-Transporter 1 Leptin Lipid Metabolism Lipids Lipolysis Lipopolysaccharides Liver  
Liver Glycogen Luciferases Maf Transcription Factors, Large Male Methylation Mice Mice, Congenic Mice, Inbred C57BL  
Mice, Knockout Mice, Obese Mice, Transgenic Microbiota Microspheres Middle Aged Models, Animal Molecular Sequence Data  
Motivation Muscle, Skeletal Muscle Cells Muscles Mutagenesis, Site-Directed Mutation Nitric Oxide Nitric Oxide Synthase Type II  
Norepinephrine Obesity Oligonucleotides Organ Size Ovariectomy Overweight Paired Box Transcription Factors Pancreas  
Pancreatotomy Pancreatic Polypeptide Parenteral Nutrition, Total PAX6 Transcription Factor Peer Group Peptides

Phosphatidylethanolamines Phosphofructokinase-1 Phosphorylation Pituitary-Adrenal System Plasmids Platelet Activation  
Play and Playthings Polyethylene Glycols Polymerase Chain Reaction Portal Vein Postprandial Period PPAR delta Precipitin Tests  
Promoter Regions, Genetic Protein Binding Protein Biosynthesis Protein Engineering Protein Interaction Domains and Motifs Proteins  
Protein Structure, Tertiary Protein Subunits Pure Autonomic Failure Rats Receptor, Muscarinic M3 Receptors, GABA-A  
Receptors, Glucagon Receptors, Vasopressin Recombinant Fusion Proteins Recombinant Proteins Regional Blood Flow Repressor Proteins  
Research Ribosomal Protein S6 Kinases, 70-kDa RNA, Messenger Saliva Salts Sequence Alignment Sequence Deletion Serpin E2  
Sex Characteristics Sex Factors Signal Transduction Single-Blind Method Social Behavior Somatostatin  
Specific Pathogen-Free Organisms Specimen Handling Stress, Physiological Stress, Psychological Subcellular Fractions  
Sulfonylurea Compounds Surveys and Questionnaires Sympathomimetics Thrombosis Tissue and Organ Procurement Tissue Distribution  
Tissue Donors Trans-Activators Transcription, Genetic Transcriptional Activation Transcription Factors Transfection Triglycerides  
Tumor Necrosis Factor-alpha Vascular Endothelial Growth Factor A Vasculitis Venoms Wechsler Scales Weight Gain Young Adult Zinc  
Zinc Transporter 8