

In addition to being a component of the Molecular Physiology Shared Resource Core (MPSR), the Bariatric Surgery Core is a component of the [Mouse Metabolic Phenotyping Center Metabolic Pathophysiology Core](#).

**Keywords:** [bariatric surgery](#) [Bariatric](#) [surgery](#) [sleeve gastrectomy](#) [Roux-en-Y](#) [gastric](#) [bypass](#) [biliopancreatic diversion](#)  
[Gastric Bypass](#)

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One of three surgical procedures can be provided: sleeve gastrectomy, Roux-en-Y gastric bypass and biliopancreatic diversion. *Sleeve gastrectomy* is a restrictive bariatric surgical approach that maintains gastric continuity and eliminates the greater curvature region of the stomach. *Roux-en-Y gastric bypass (mRYGB)* is a bypass procedure that is a modification of the standard is the RYGB performed in humans. The jejunum is transected 4 cm distal to the ligament of Treitz. The distal jejunal segment is then connected to the forestomach. The proximal jejunal segment is anastomosed in a side to side fashion to the jejunum 4-6 cm from the site of the gastrojejunostomy. The ligation of the stomach results in a small pouch with about 25% of total stomach volume. *Biliopancreatic diversion (BPD)*: A portion of the jejunum is transected. The distal segment is anastomosed to the greater curvature of the stomach in a side-to-side fashion. Continuity of the intestinal tract is established by performing a side- to-side anastomosis. This procedure results in an isolation of the duodenum and uppermost segment of the jejunum from the GI tract. Unlike the human procedure, the proximal duodenum is ligated at the pyloric-duodenal junction, but not transected.



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## Publications / Citations

1. [Mouse Models of Bariatric Surgery](#). Yin DP, Boyd KL, Williams PE, Abumrad NN, Wasserman DH (2012) *Curr Protoc Mouse Biol* › Primary publication · [25364628](#) (PubMed) · [PMC4214370](#) (PubMed Central) · Added on 7/16/2015
2. [Striatal dopamine homeostasis is altered in mice following Roux-en-Y gastric bypass surgery](#). Reddy IA, Wasserman DH, Ayala JE, Hasty AH, Abumrad NN, Galli A (2014) *ACS Chem Neurosci* **5(10)**: 943-51 › Primary publication · [25068716](#) (PubMed) · [PMC4324416](#) (PubMed Central) · Added on 1/21/2015

## MeSH Terms

[Adiposity](#) [Anastomosis, Roux-en-Y](#) [Animals](#) [Body Weight](#) [Caloric Restriction](#) [Corpus Striatum](#) [Diet, High-Fat](#) [Dopamine](#) [Gastric Bypass](#)  
[Homeostasis](#) [Immunoblotting](#) [Male](#) [Mice, Inbred C57BL](#) [Mitogen-Activated Protein Kinase 1](#) [Mitogen-Activated Protein Kinase 3](#)  
[Norepinephrine](#) [Obesity](#) [Phosphorylation](#) [Receptor, Insulin](#) [Tyrosine 3-Monooxygenase](#)