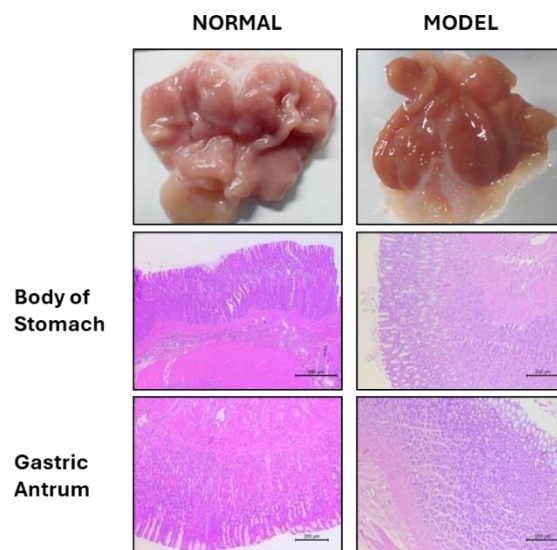
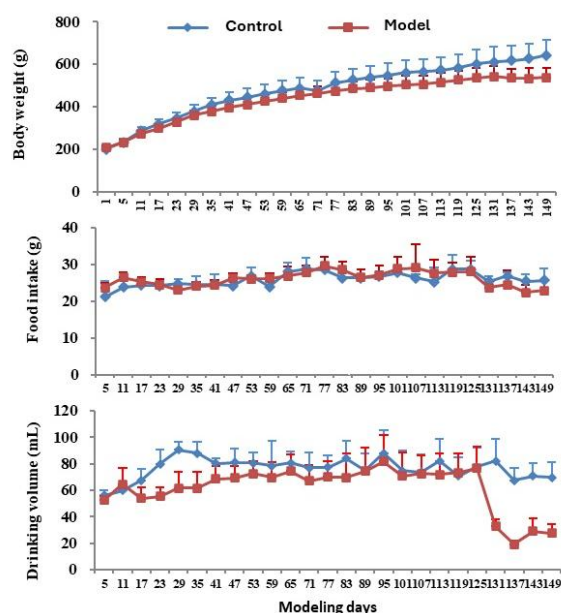


## Therapeutic Areas: Models for Gastrointestinal Diseases

Our gastrointestinal and hepatobiliary model platform enables robust efficacy and MoA testing across IBD, ulcer / gastritis, liver and pancreatic diseases, and GI oncology. We offer DSS / TNBS colitis for ulcerative / Crohn's disease, H. pylori and ulcer models, NASH / NAFLD and liver fibrosis (MCD / CDAA diets, CCl<sub>4</sub>), cerulein-induced pancreatitis, and AOM / DSS colorectal cancer. With clinically relevant endpoints—endoscopy and histology scoring, cytokines, microbiome readouts, liver enzymes and fibrosis indices—we generate decision-ready data to de-risk small molecules, biologics, and microbiome-based therapies.



*Featured model: chronic atrophic gastritis rat model: MNNG + ranitidine + eating disorders and other multiple factors. Images show mild chemosis of mucosal glands.*

| Disease Type                       | Animal Model / Study                                            |
|------------------------------------|-----------------------------------------------------------------|
| Gastric Ulcer                      | Model of Aspirin-induced gastric ulcer                          |
| Gastric Mucosal Injury             | Model of pyloric ligation-induced gastric ulcer                 |
| Gastric Acid Secretion             | Model of histamine-induced gastric ulcer                        |
|                                    | Model of restraint water-immersion stress-induced gastric ulcer |
|                                    | Model of anhydrous ethanol-induced gastric mucosal injury       |
|                                    | Model of glacial acetic acid-induced gastric ulcer              |
|                                    | Isolated gastric acid secretion and other tests                 |
| Duodenal Ulcer                     | Model of cysteine-induced duodenal ulcer                        |
|                                    | Model of glacial acetic acid-induced duodenal ulcer             |
| Gastrointestinal Motility Disorder | Gastric emptying test                                           |
|                                    | Intestine propulsion test                                       |
|                                    | Model of folium sennae-induced diarrhea                         |
|                                    | Model of diphenoxylate/loperamide-induced constipation          |
| Liver Disease                      | Hepatitis                                                       |