APPENDIX 4: **Abbreviations and Acronyms**

5-ASA 5-aminosalicylic acid 5HT 5-hydroxytryptamine

ABCA1 ATP-binding cassette, subfamily A, member 1 ABCG5/G8 ATP-binding cassette transporters G5 and G8

ACTH adrenocorticotropic hormone

AIDS acquired immunodeficiency syndrome

AIEC adherent invasive E. coli AIH autoimmune hepatitis AIP autoimmune pancreatitis

ALADIN alacrima-achalasia-adrenal insufficiency neurologic disorder protein

AMP adenosine monophosphate APC adenomatosis polyposis coli APJ apical junctional complex

ApoB apolipoprotein B ApoE apolipoprotein E

APRIL a proliferation inducing ligand

ATG16L1 ATG16 autophagy related 16-like 1 protein

BAFF B cell-activating factor of the tumor necrosis factor family

BMP bone morphogenic protein

BRCA2 breast cancer type 2 susceptibility protein

CCK cholecystokinin

CCR3 chemokine receptor 3

CD Crohn's disease

CD1/CD25/CD40 cluster of differentiation molecules

CDX2 caudal-related homeobox 2

CF cystic fibrosis

CFTR cystic fibrosis transmembrane conductance regulator

CI colonic ischemia

CIMP CpG island methylator phenotype

CNS central nervous system

COX cyclooxygenase

CRF corticotropin-releasing factor **CRH** corticotropin-releasing hormone

CT computed tomography DC dendritic cells

DDICC Digestive Diseases Interagency Coordinating Committee

DDLT deceased donor liver transplant **DGAT** diacylglycerol acetyltransferase

DHHS U.S. Department of Health and Human Services

DNA deoxyribonucleic acid **EAEC** enteroaggregative E. coli

EGID eosinophilic gastrointestinal disorders

EGJ esophagogastric junction **ENS** enteric nervous system **EPEC** enteropathogenic E. coli endoplasmic reticulum ER

ERCP endoscopic retrograde cholangio-pancreatography

EUS endoscopic ultrasound **FABP** fatty acid binding protein **FAP** familial adenomatous polyposis **FATP** fatty acid transport protein

FDA U.S. Food and Drug Administration

FDG-PET 2-[18F] fluoro-2-deoxy-D-glucose positron emission tomography

FGF fibroblast growth factor FIC Fogarty International Center

fMRI functional magnetic resonance imaging FoxP3 forkhead box P3 transcription factor

FXR farnesoid X receptor

GABAB gamma-aminobutyric acid B receptor **GERD** gastroesophageal reflux disease Gfi growth factor independence protein

GΙ gastrointestinal

GIP glucose-dependent insulinotropic polypeptide

GIST gastrointestinal stromal tumor

GLP-2 glucagon-like peptide-2

HBV hepatitis B virus

HCC hepatocellular carcinoma

HCV hepatitis C virus

HDL high-density lipoprotein

HEV hepatitis E virus

HFE hemochromatosis gene

HIV human immunodeficiency virus HLA human leukocyte antigen

HNPCC hereditary nonpolyposis colorectal cancer

hPEPT1 human peptide transporter 1 **IBD** inflammatory bowel diseases IBS irritable bowel syndrome **ICC** interstitial cells of Cajal

International Classification of Diseases **ICD**

lgΑ immunoglobulin A **IgG** immunoglobulin G

IGF-1 insulin-like growth factor-1

interleukin IL

insulin-induced gene 1 Insig-1

IPMN intraductal papillary mucinous neoplasm

ISC intestinal stem cell

LDLT living donor liver transplant LES lower esophageal sphincter

Lgr5 leucine-rich repeat-containing G-protein coupled receptor 5

LRR leucine-rich repeat **LXR** liver X receptor

MAdCAM-1 mucosal addressin cell adhesion molecule 1

Math-1 mouse atonal homolog 1

MALT mucosa associated lymphoid tissue

MCN mucinous cystic neoplasm MCT monocarboxylate transporter Mdr2 multiple drug resistance 2

MELD Model for End-Stage Liver Disease MEN 1 multiple endocrine neoplasia type 1 **MGAT** mannoside acetylglucosaminyltransferase

MLCK myosin light chain kinase

MMR mismatch repair

MRI magnetic resonance imaging

MRP2 multidrug resistance-associated protein family

MSC mesenchymal stem cell

MYH Mut Y homolog

NASH non-alcoholic steatohepatitis

NCCAM National Center for Complementary and Alternative Medicine

NCI National Cancer Institute

NCMHD National Center on Minority Health and Health Disparities

NCRR National Center for Research Resources

NEC necrotizing enterocolitis **NERD** non-erosive reflux disease NF-κB Nuclear Factor kappa-B

NHGRI National Human Genome Research Institute **NHLBI** National Heart, Lung, and Blood Institute

NIA National Institute on Aging

NIAAA National Institute on Alcohol Abuse and Alcoholism NIAID National Institute of Allergy and Infectious Diseases

NIBIB National Institute of Biomedical Imaging and Bioengineering

NICHD Eunice Kennedy Shriver National Institute of Child Health and Human Development

NIDA National Institute on Drug Abuse

NIDCR National Institute of Dental and Craniofacial Research

NIDDK National Institute of Diabetes and Digestive and Kidney Diseases

NIEHS National Institute of Environmental Health Sciences

National Institutes of Health NIH

NIMH National Institute of Mental Health

NINDS National Institute of Neurological Disorders and Stroke

NINR National Institute of Nursing Research

natural killer NK **NKT** natural killer T cell

nitric oxide NO

NOTES natural orifice transluminal endoscopic surgery

NPC1L1 Niemann-Pick C1 Like 1 protein

NSAID non-steroidal anti-inflammatory drug

NSC neural stem cell

OD NIH Office of the Director

OPASI Office of Portfolio Analysis and Strategic Initiatives

ORS oral rehydration solution

PanIN pancreatic intraepithelial neoplasia

PBC. primary biliary cirrhosis **PCR** polymerase chain reaction

PDC-E2 pyruvate dehydrogenase complex-E2

PDGFRA platelet-derived growth factor receptor, alpha polypeptide

PELD Pediatric End-Stage Liver Disease **PET** positron emission tomography

PN parenteral nutrition

PPAR peroxisome proliferator-activated receptor

PPI proton pump inhibitor

PSC primary sclerosing cholangitis **PTEN** phosphatase and tensin homolog

PUD peptic ulcer disease

PYY peptide YY

RAR retinoic acid receptor

ribosomal deoxyribonucleic acid rDNA

RNA ribonucleic acid

Runx3 runt-related transcription factor 3 RVrotavirus

SBP spontaneous bacterial peritonitis

SBS short bowel syndrome

SREBP cleavage-activating protein Scap

short chain fatty acids **SCFA**

SERT serotonin reuptake transporter siRNA small interfering ribonucleic acid **SNP** single nucleotide polymorphism

SPECT single photon emission computed tomography

SPINK1 serine protease inhibitor, Kazal type 1

SQUID superconducting quantum interference device sterol-regulatory element binding protein **SREBP**

STAT3 signal transducer and activator of transcription 3

STEP serial transverse enteroplasty

TE/RM tissue engineering/regenerative medicine

TFF trefoil factor

TGF transforming growth factor

tissue inhibitor of metalloproteinases TIMP

TLR Toll-like receptor **TNF** tumor necrosis factor

TRPV1 transient receptor potential vanilloid 1

TSLP thymic stromal lymphopoietin

UC ulcerative colitis

VEGF vascular endothelial growth factor

ZES Zollinger-Ellison syndrome