

2021 AGA Expanded Descriptors

| SECTION                               | DESCRIPTOR  | Expanded Descriptor  |
|---------------------------------------|---|--|
| Basic & Clinical Intestinal Disorders | Basic Mechanisms of Tissue Injury, Repair and Fibrosis  | Aims to feature studies on biochemistry, biophysics, and molecular cell biology of tissue injury, repair, and development of fibrosis.   |
| Basic & Clinical Intestinal Disorders | Celiac Disease and Gluten Related Disorders   | Aims to include studies on the immunology and cellular/tissue pathogenesis of celiac disease and gluten sensitivity including human, translational, basic in vitro cell and tissue models, genetic, and in vivo animal studies. Genetic studies which involve the elucidation of the mechanism or genetic factors that contribute to immunopathogenesis of celiac disease are included in this descriptor. Also included are large population studies that address genetics, prevalence of celiac disease in adults or children, comparative studies of risk, and differences in populations or secular trends.  |
| Basic & Clinical Intestinal Disorders | Cell and Molecular Biology of Gastrointestinal Disorders  | Features studies on molecular and cellular mechanisms of GI disease.   |
| Basic & Clinical Intestinal Disorders | Cell Biology, Biochemistry and Integrative Physiology   | Features basic cell biology, biochemistry and physiology in GI health.   |
| Basic & Clinical Intestinal Disorders | Cell Signaling in Inflammation, Injury and Mucosal Repair   | Aims to feature basic cellular and molecular signaling pathways involved in intestinal inflammation, injury and repair.  |
| Basic & Clinical Intestinal Disorders | Clostridioides difficile Colitis: Pathogenesis, Diagnosis, Management and Therapy   | Diagnosis, management and treatment of C. difficile infection (CDI). Host-microbial crosstalk in CDI susceptibility. Microbial and Biotic-based therapy for CDI. CDI pathogenesis (excluding toxin virulence mechanism).   |
| Basic & Clinical Intestinal Disorders | COVID and GI  | Aims to include clinical and basic studies on mechanisms by which SARS-CoV-2 infects and replicates within human gut enterocytes as well as GI manifestations and outcomes of SARS-CoV-2 infection.  |
| Basic & Clinical Intestinal Disorders | COVID and Interactions with the Microbiome and COVID and Immune Defense   | Considers basic and clinical studies related to COVID and the microbiome (gut, lung, nasal etc) and systemic and local immune responses. Includes changes in microbiome associated with susceptibility, outcomes and prognosis of COVID, the role of microbiome in pathogenesis of COVID for eg. regulating ACE2 receptor expression, modulating mucosal and/or systemic immune responses to COVID, facilitating fecal carriage and transmission, driving extrapulmonary manifestations of COVID etc.  |
| Basic & Clinical Intestinal Disorders | COVID: SARS-CoV-2 Cellular and Molecular Interactions with Digestive Organs   | Features basic science related to SARS-CoV-2 interaction with the GI tract and/or of COVID-19 effects on GI organs.  |
| Basic & Clinical Intestinal Disorders | Diarrheal Disorders: Bacterial Overgrowth - Drug Induced and Other Enterocolitides (Microscopic, Enteropathy, Check Point Inhibitors, Etc.)     | Aims to feature clinical, epidemiological and basic studies on pathogenesis of diarrheal diseases and other enteropathies including environmental enteropathy, ischemic, toxin, drug induced, allergic, autoimmune, diverticular disease. Consequences or outcomes of these illness would be also included. Also includes clinical and basic studies on novel small molecule and biologic therapeutics, and pre- and probiotics, for the intestinal disorders including diarrhea, irritable bowel, auto immune, environmental enteropathies, drug-induced, and microbial induced intestinal diseases. This descriptor excludes celiac disease, C. difficile and the chronic inflammatory bowel diseases (IBD). |
| Basic & Clinical Intestinal Disorders | Enteric Neuromuscular Biology: Cell and Molecular Biology (Including Neurons, Glia, ICC, Smooth Muscle, Stem Cells & Development, Pharmacology) | Evaluates abstracts pertaining to basic visceral pain, microbiome, neuromediators, neurotransmitters, neurogenic Inflammation, pain, viscerovisceral cross talk, gut microbiota, visceral hypersensitivity.  |
| Basic & Clinical Intestinal Disorders | Epithelial Function and Ion, Water and Nutrient Absorption  | Research focused on epithelial transport including mechanisms, roles of various components, downstream effect of dys-regulated transport.  |
| Basic & Clinical Intestinal Disorders | Epithelial Junctions and Barrier Function   | Features studies on biochemistry, biophysics, and molecular and cell biology of cell adhesion and junction protein complexes, of epithelial polarization and assembly into restrictive monolayers, and in epithelial repair of barrier function after injury.  |

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| Basic & Clinical Intestinal Disorders | Food Intolerances, Allergy, and Sensitivities                                 | Disaccharide deficiencies, lactose, fructose or other food intolerances or sensitivities would be included and GI manifestations of food allergies. Studies that pertain to histamines or other responses to foods or dietary changes would also come under this descriptor. The interaction between microbiome and diet, in particular, where it relates to disease or gastrointestinal function/dysfunction would also come under this descriptor. |
| Basic & Clinical Intestinal Disorders | Genetics and Gastrointestinal Disorders                                       | Aims to feature clinical and basic studies on mono-genetic intestinal diseases and intestinal failure.   |
| Basic & Clinical Intestinal Disorders | In Vivo Models of Gastrointestinal Disorders                                  | Features studies of GI diseases using animal models.   |
| Basic & Clinical Intestinal Disorders | Inflammation and GI Cancers   | Research focused on inflammatory mechanisms that underlie GI cancer initiation, development, and progression. Research can include sporadic cancer as well as cancers secondary to inflammatory diseases (e.g. inflammatory bowel disease). Can include both preclinical and clinical studies.   |
| Basic & Clinical Intestinal Disorders | Intestinal Inflammation, Fibrosis and Regeneration                            | Aims to feature basic studies of intestinal injury by inflammation, radiation or hypoxia, and mechanisms of repair, fibrosis, and stricture formation.   |
| Basic & Clinical Intestinal Disorders | Irritable Bowel Syndrome: Clinical  | Aims to feature clinical studies on pathogenesis, diagnosis, disease outcome, treatment, disease progression of Irritable Bowel Syndrome.  |
| Basic & Clinical Intestinal Disorders | Irritable Bowel Syndrome: Pathophysiology                                     | Evaluates abstracts that focus on basic (preclinical) and translational studies including pathogenesis, diagnosis and disease progression of Irritable Bowel Syndrome.   |
| Basic & Clinical Intestinal Disorders | Microbial Pathogens and Toxins of the Intestine and Colon                     | Aims to feature studies on microbial pathogenesis for enterotoxins and bacterial, viral, fungal infections of gut - excluding C. Diff toxin induced disease.   |
| Basic & Clinical Intestinal Disorders | Microbiome and Infectious Diseases  | Pathogens and pathogenic virulence mechanisms that affect the gut microbiome and cause infectious diseases (viral, fungal, parasitic, bacterial, excluding C. difficile infection). Alternations in genomics and function of commensal microbes that lead to negative, disease-causing consequences. Perturbations or aberrant host functions that lead to altered gut microbial function that can promote infectious diseases.                      |
| Basic & Clinical Intestinal Disorders | Mucosal Innate Function and Innate Host Defense: Inflammatory Bowel Disease   | Basic and translational studies on mucosal innate immune function and innate host defense - human or animal studies.   |
| Basic & Clinical Intestinal Disorders | Non-Immune Cells in Intestinal Inflammation: Epithelium and Stroma            | Studies of the role of the cells of the epithelium and stromal cells (not professional immune cells) in intestinal inflammation.   |
| Basic & Clinical Intestinal Disorders | Organoid Models of Gastrointestinal Disorders                                 | Features studies of gastrointestinal function or disease using organoids.  |
| Basic & Clinical Intestinal Disorders | Prebiotics, Probiotics and Synbiotics in Health and Disease                   | Use of prebiotics, probiotics, postbiotics and synbiotics (biotics) in the treatment and prevention of GI and extraintestinal disease. Biotic functions, mechanisms of action and interactions with the endogenous microbiome and host. Bioengineering new biotic functions. Biotic clinical and regulatory considerations.  |
| Basic & Clinical Intestinal Disorders | Role of the Gut Microbiome and Pathogens in Immune and Inflammatory Diseases  | Gut microbial role in inflammatory diseases of the bowel, including inflammatory bowel diseases, Celiac disease, food allergy, graft-versus-host, Dysmotility, etc. Mediators, mechanisms, and targets of microbial pathogenesis that cause and/or contribute to these diseases.   |
| Basic & Clinical Intestinal Disorders | Stem Cells in Health, Development, and Malignant Transformation               | Features investigations of diverse aspects of stem cells, including so-called Cancer Stem Cells, stem cells as cells of origin for cancer, and stem cells in normal homeostasis and regeneration.  |
| Basic & Clinical Intestinal Disorders | Tissue Engineering and Regenerative Medicine                                  | Cutting-edge techniques for refining, growing, and expanding engineered GI tract, liver, and pancreas tissues for replacement or augmentation of compromised organs in patients.   |
| Basic & Clinical Intestinal Disorders | Transcriptional, Epigenetic and Genetic Regulation of GI Function and Disease | Aims to feature studies on gene expression, gene regulation, and gene suppression leading to gastrointestinal disease, including mechanisms by alterations of chromatin structure.   |

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| Basic & Clinical Intestinal Disorders | Vitamins and Micronutrients: Basic and Clinical   | Basic and clinical studies of vitamins and micronutrients, including requirements and intestinal absorption in health and disease, transporter function and regulation, nutritional biology, metabolism and deficiency states.  |
| Cellular & Molecular Gastroenterology | Basic Mechanisms of Tissue Injury, Repair and Fibrosis  | Aims to feature studies on biochemistry, biophysics, and molecular cell biology of tissue injury, repair, and development of fibrosis.  |
| Cellular & Molecular Gastroenterology | Carcinoid and GI Neuroendocrine Neoplasm: Cell Biology, Genetics, Development, Diagnosis and Clinical Therapeutics                              | Research focused on gastrointestinal neuroendocrine tumors (NET). Research can include both preclinical (basic) and clinical studies. Research can span basic biology and mechanisms of NET development and progression, the genetic basis of NET, and diagnosis and treatment. |
| Cellular & Molecular Gastroenterology | Cell and Molecular Biology of Gastrointestinal Disorders  | Features studies on molecular and cellular mechanisms of GI disease.  |
| Cellular & Molecular Gastroenterology | Cell Biology, Biochemistry and Integrative Physiology   | Features basic cell biology, biochemistry and physiology in GI health.  |
| Cellular & Molecular Gastroenterology | Cell Signaling in Inflammation, Injury and Mucosal Repair   | Aims to feature basic cellular and molecular signaling pathways involved in intestinal inflammation, injury and repair.   |
| Cellular & Molecular Gastroenterology | Cellular Plasticity and Tissue Regeneration (Remodeling, Transdifferentiation, Dedifferentiation)   | Aims to feature cellular alterations associated with remodeling or transformation events involved in GI injury and disease.   |
| Cellular & Molecular Gastroenterology | COVID: SARS-CoV-2 Cellular and Molecular Interactions with Digestive Organs   | Features basic science related to SARS-CoV-2 interaction with the GI tract and/or of COVID-19 effects on GI organs  |
| Cellular & Molecular Gastroenterology | Enteric Neuromuscular Biology: Cell and Molecular Biology (Including Neurons, Glia, ICC, Smooth Muscle, Stem Cells & Development, Pharmacology) | Evaluates abstracts pertaining to basic visceral pain, microbiome, neuromediators, neurotransmitters, neurogenic Inflammation, pain, viscerovisceral cross talk, gut microbiota, visceral hypersensitivity.   |
| Cellular & Molecular Gastroenterology | Epithelial Junctions and Barrier Function   | Features studies on biochemistry, biophysics, and molecular and cell biology of cell adhesion and junction protein complexes, of epithelial polarization and assembly into restrictive monolayers, and in epithelial repair of barrier function after injury.                   |
| Cellular & Molecular Gastroenterology | Gastric Neoplasms: Precursor Lesions, Biology, Diagnosis and Therapy  | Precursor lesions, biology, diagnosis and clinical therapeutics: research focused on precursors (i.e. intestinal metaplasia, dysplasia, MALTs), biology, diagnosis and clinical therapies directed at all types of gastric neoplasms.   |
| Cellular & Molecular Gastroenterology | Genetics and Gastrointestinal Disorders   | Aims to feature clinical and basic studies on mono-genetic intestinal diseases and intestinal failure.  |
| Cellular & Molecular Gastroenterology | Growth Factors in Differentiation, Cell Proliferation, Morphogenesis and Apoptosis  | Aims to feature studies on regulation of cell differentiation, proliferation, morphogenesis, and apoptosis in GI homeostasis and disease.   |
| Cellular & Molecular Gastroenterology | In Vivo Models of Gastrointestinal Disorders  | Features studies of GI diseases using animal models.  |
| Cellular & Molecular Gastroenterology | Intestinal Inflammation, Fibrosis and Regeneration  | Aims to feature basic studies of intestinal injury by inflammation, radiation or hypoxia, and mechanisms of repair, fibrosis, and stricture formation.  |
| Cellular & Molecular Gastroenterology | Molecular Mechanisms of Growth and Development of the GI Tract, Liver and Pancreas  | Basic cellular mechanisms driving the establishment, development, and function of the digestive organs. Pathways driving cellular differentiation and organ maturation.   |
| Cellular & Molecular Gastroenterology | Organoid Models of Gastrointestinal Disorders   | Features studies of gastrointestinal function or disease using organoids.   |
| Cellular & Molecular Gastroenterology | Stem Cells in Health, Development, and Malignant Transformation   | Features investigations of diverse aspects of stem cells, including so-called Cancer Stem Cells, stem cells as cells of origin for cancer, and stem cells in normal homeostasis and regeneration.   |
| Cellular & Molecular Gastroenterology | Tissue Engineering and Regenerative Medicine  | Cutting-edge techniques for refining, growing, and expanding engineered GI tract, liver, and pancreas tissues for replacement or augmentation of compromised organs in patients.  |
| Cellular & Molecular Gastroenterology | Transcriptional, Epigenetic and Genetic Regulation of GI Function and Disease   | Aims to feature studies on gene expression, gene regulation, and gene suppression leading to gastrointestinal disease, including mechanisms by alterations of chromatin structure.  |

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| Cellular & Molecular Gastroenterology | Tuft Cells and Endocrine Function in the GI Tract   | Features mechanisms of cell biology of Tuft and endocrine cell function in homeostasis and disease, including chemosensing, hormone secretion and inflammation.   |
| Clinical Practice                     | Advancements in Population Health Cancer Screening: Gastric, Esophageal, Hepatocellular, Other Cancer Screening                   | Evaluates abstracts pertaining to cancer screening outside of colorectal cancer screening (note: colorectal cancer screening has its own descriptors). For instance, screening or surveillance for cancers of the stomach, esophagus, liver, or pancreas. Additionally includes population health screening for other health outcomes, such as celiac disease, H. pylori, etc. that can be related to cancer outcomes.            |
| Clinical Practice                     | Colorectal Cancer Screening and Surveillance: Clinical studies to Improve Uptake, Increase Adherence & Address Racial Disparities | Evaluates abstracts examining the impact of racial disparities on colorectal cancer screening and surveillance and including efforts to improve adherence and/or screening outcomes in these populations. In addition, abstracts generally focused on efforts or processes that enhance adherence and uptake of current colon cancer screening and surveillance in populations at large would be appropriate for this descriptor. |
| Clinical Practice                     | Colorectal Cancer Screening and Surveillance: Cohort, Clinical Outcomes & Comparative Effectiveness Studies including Trials      | Research focused on epidemiologic studies (cohort and case control), comparative effectiveness/decision analysis modeling, and clinical trials aimed at testing the effectiveness of screening and surveillance strategies for colorectal cancer. This can include both endoscopic and non-invasive screening strategies.   |
| Clinical Practice                     | Colorectal Cancer Screening and Surveillance: Innovations, New Technology   | Any research involving the use of new technologies or innovations as it pertains to the field of colorectal cancer screening and/or surveillance. Can include technological advances in any aspect including but not limited to endoscopy, radiology, pathology, stool testing, sedation, computer models, patient engagement tools, etc.   |
| Clinical Practice                     | Epidemiology of Gastrointestinal Disorders  | Evaluates abstracts using epidemiologic methods that do not easily fit into other descriptors. Includes studies of risk factors for gastrointestinal disease and trends in disease incidence and outcome. Generally leverages population-level databases.   |
| Clinical Practice                     | Guideline Adoption and Implementation   | Evaluates abstracts where the aim of the study is to determine the adherence to prevailing clinical guidelines. This descriptor also includes abstracts evaluating the success of efforts/methods to implement guidelines into clinical practice and/or the outcome of guideline implementation into clinical practice.   |
| Clinical Practice                     | Health Care Delivery and Policy (Practice Management Including Telehealth & COVID related issues, Reimbursement, Access to Care)  | Evaluates abstracts pertaining to business issues of practice (either community or academic), government or insurer policies including analyses of their effects, and access to care. This descriptor is not intended for cost-effectiveness analyses, process improvement, or performance metrics.   |
| Clinical Practice                     | Health Disparities and Global Health  | Evaluates abstracts regarding disparities in health outcomes based on race or socioeconomic status. Also evaluates studies specific to healthcare in developing countries, including epidemiology, delivery of healthcare, and outcomes.  |
| Clinical Practice                     | Health Economics (Cost of Illness, Cost-Effectiveness, and Health Economic Models)  | Evaluates studies of computer simulations or empirically observed cost data. Not intended for abstracts regarding practice management issues or reimbursement.  |
| Clinical Practice                     | Medical Education and Training  | Evaluates studies where the unit of observation is the provider or trainee, including observational studies and interventions. Not intended for patient case reports or clinical pearls.  |
| Clinical Practice                     | Patient Reported and Clinical Outcomes: IBD, GERD, Functional Disorders, Other  | Evaluates abstracts regarding development or validation of Patient Reported Outcomes (PROs) instruments, including those regarding quality of life. Also evaluates abstracts where the primary outcome is Patient Reported Outcomes. Clinical outcome studies involving these areas are also appropriate for this descriptor.   |

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| Clinical Practice                 | Performance Metrics, Process Improvement, and Implementation Science  | Evaluates abstracts pertaining to, for instance, methodologic advances in measuring quality of care, studies identifying key processes to be targeted for improving quality of care, and observational or experimental studies with a primary outcome being quality of care. Also evaluates abstracts regarding studies evaluating implementation of best practices or quality assurance programs in clinical practice. The descriptor is not intended for abstracts pertaining to quality of life, endoscopic innovations, or animal studies. |
| Clinical Practice                 | Systematic Reviews and Meta-Analysis of Gastrointestinal Disorders  | Evaluates abstracts using systematic review and meta-analyses that do not fit easily into other descriptors.   |
| Endoscopy, Technology and Imaging | Artificial Intelligence and/or Machine Learning   | Includes all studies that involve the use of artificial intelligence and/or machine learning   |
| Endoscopy, Technology and Imaging | Colorectal Cancer Screening and Surveillance: Clinical studies to Improve Uptake, Increase Adherence & Address Racial Disparities | Evaluates abstracts examining the impact of racial disparities on colorectal cancer screening and surveillance and including efforts to improve adherence and/or screening outcomes in these populations. In addition, abstracts generally focused on efforts or processes that enhance adherence and uptake of current colon cancer screening and surveillance in populations at large would be appropriate for this descriptor.  |
| Endoscopy, Technology and Imaging | Colorectal Cancer Screening and Surveillance: Cohort, Clinical Outcomes & Comparative Effectiveness Studies including Trials      | Research focused on epidemiologic studies (cohort and case control), comparative effectiveness/decision analysis modeling, and clinical trials aimed at testing the effectiveness of screening and surveillance strategies for colorectal cancer. This can include both endoscopic and non-invasive screening strategies.  |
| Endoscopy, Technology and Imaging | Colorectal Cancer Screening and Surveillance: High Risk Populations, Including Hereditary Syndromes, Inflammatory Bowel Disease   | Research focused on epidemiologic studies (cohort and case control), comparative effectiveness/decision analysis modeling, and clinical trials aimed at evaluating screening and surveillance among individuals with hereditary syndromes and inflammatory bowel disease. This can include both endoscopic and non-invasive screening strategies.  |
| Endoscopy, Technology and Imaging | Colorectal Cancer Screening and Surveillance: Innovations, New Technology   | Any research involving the use of new technologies or innovations as it pertains to the field of colorectal cancer screening and/or surveillance. Can include technological advances in any aspect including but not limited to endoscopy, radiology, pathology, stool testing, sedation, computer models, patient engagement tools, etc.  |
| Endoscopy, Technology and Imaging | COVID-19 Related to Endoscopy, Technology, or GI Imaging  | Studies that include COVID-19 as it relates to gastrointestinal endoscopy, any novel technologies, or any type of imaging (radiology, pathology, novel, etc.) of the gastrointestinal tract  |
| Endoscopy, Technology and Imaging | Digital Technologies Including Novel Software, Hardware, Internet/Social Media, and Wearables                                     | Any application of digital technologies including but not limited to novel computer software, applications, chatbots, programs, hardware/devices, internet, social media, web platforms, or wearables  |
| Endoscopy, Technology and Imaging | Imaging Techniques and Technologies in GI   | Includes all research related to novel or advanced imaging technologies and techniques throughout the entire GI tract  |
| Endoscopy, Technology and Imaging | Medical Education and Training  | Evaluates studies where the unit of observation is the provider or trainee, including observational studies and interventions. Not intended for patient case reports or clinical pearls.   |
| Endoscopy, Technology and Imaging | Novel, Experimental, or Robotic Endoscopy   | Includes research related to any form of novel, experimental, or robotic endoscopy   |
| Endoscopy, Technology and Imaging | Pancreatic and Biliary Disorders: Endoscopy and Imaging   | Includes any research involving the use of endoscopy or imaging as it pertains to pancreatic and/or biliary disorders.   |
| Endoscopy, Technology and Imaging | Portal Hypertension, Complications of Cirrhosis, and GI Bleeding  | Portal hypertension, variceal bleeding, ascites, hepatic encephalopathy, hepatic hydrothorax, portopulmonary hypertension, hepatopulmonary syndrome.   |
| Endoscopy, Technology and Imaging | Telehealth in Endoscopy and/or Radiology and Pathology  | Includes any application of telehealth as it pertains to GI endoscopy, radiology, and/or pathology   |

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| Esophageal, Gastric & Duodenal Disorders | Barrett's Esophagus and Esophagogastric Junction Neoplasia - Biology and Fundamental Mechanism   | Evaluates the pathogenesis of Barrett's esophagus and esophagogastric junction neoplasia.  |
| Esophageal, Gastric & Duodenal Disorders | Barrett's Esophagus and Esophagogastric Junction Neoplasia - Epidemiology, Risk Factors, Screening and Surveillance, Treatment and Clinical Outcomes | Evaluates abstracts related to diagnosis, management and surveillance of patients with Barrett's esophagus. It is not intended for abstracts directly related to GERD.   |
| Esophageal, Gastric & Duodenal Disorders | Eosinophilic Esophagitis and Gastroenteritis: Clinical   | Evaluates clinical abstracts related to the diagnosis, testing or management of patients with eosinophilic esophagitis and gastroenteritis. It is intended for the clinical aspects of the disease.  |
| Esophageal, Gastric & Duodenal Disorders | Eosinophilic Esophagitis and Gastroenteritis: Translational or Basic   | Evaluates basic science or translational abstracts related to disease pathogenesis and treatment.  |
| Esophageal, Gastric & Duodenal Disorders | Functional Dyspepsia, Nausea and Vomiting  | Evaluates abstracts pertaining to abdominal pain, nausea, functional dyspepsia, non ulcer dyspepsia, psychological distress, pathophysiologic distress, vomiting, rumination, cyclical vomiting syndrome, cannabis hyperemesis syndrome, epigastric pain syndrome, postprandial distress syndrome. |
| Esophageal, Gastric & Duodenal Disorders | Gastric Neoplasms: Precursor Lesions, Biology, Diagnosis and Therapy   | Precursor lesions, biology, diagnosis and clinical therapeutics: research focused on precursors (i.e. intestinal metaplasia, dysplasia, MALTs), biology, diagnosis and clinical therapies directed at all types of gastric neoplasms.  |
| Esophageal, Gastric & Duodenal Disorders | GERD: Clinical presentations including Extra-Esophageal manifestations and disease complications   | Evaluates the epidemiology, clinical manifestations and complications of GERD. It is not intended for abstracts directly related to Barrett's esophagus (note separate EGD descriptor).  |
| Esophageal, Gastric & Duodenal Disorders | GERD: Diagnostic Testing   | Evaluates the role of diagnostic testing in the management of GERD.  |
| Esophageal, Gastric & Duodenal Disorders | GERD: Medical, Surgical and Endoscopic Therapies   | Evaluates the medical, endoscopic and surgical treatment of GERD. Includes abstracts discussing adverse events related to these therapies.   |
| Esophageal, Gastric & Duodenal Disorders | Helicobacter pylori: Epidemiology, Diagnosis and Outcomes  | Evaluates abstracts related to epidemiology, diagnosis and, outcomes of H. pylori infection. It is not intended for abstracts related to H. pylori host response, pathogenic mechanisms, treatment, or antimicrobial resistance.   |
| Esophageal, Gastric & Duodenal Disorders | Helicobacter pylori: Host Response and Pathogenesis  | Evaluates abstracts related to host response induced by H. pylori infection and understanding mechanisms of disease pathogenesis during H. pylori infection. It is not intended for abstracts related to H. pylori epidemiology, treatment, diagnosis, or outcomes.                                |
| Esophageal, Gastric & Duodenal Disorders | Helicobacter pylori: Treatment and Antimicrobial Resistance  | Evaluates abstracts related to H. pylori treatment and antimicrobial resistance. It is not intended for abstracts related to H. pylori host response, pathogenic mechanisms, epidemiology, or outcomes.  |
| Esophageal, Gastric & Duodenal Disorders | Mucosal Defense, Secretion, Injury, Repair and Healing   | Evaluates abstracts related to mechanisms of upper GI mucosal defense, secretion, injury, repair and healing. It is not intended for abstracts related to H. pylori host response or pathogenic mechanisms, nor to mucosal defenses in the lower GI tract.   |
| Esophageal, Gastric & Duodenal Disorders | Oropharyngeal and Esophageal Motility Disorders  | Evaluates abstracts related to the diagnosis and management of oropharyngeal and esophageal motility disorders. It is not intended for abstracts related to GERD or EoE.   |
| Esophageal, Gastric & Duodenal Disorders | Pathogenetic Mechanisms/Biology of GERD and GERD Therapies   | Evaluates the pathogenesis of GERD, GERD complications and GERD therapeutics. Intended for basic science and translational studies.  |
| Esophageal, Gastric & Duodenal Disorders | Peptic Ulcer Disease   | Evaluates all abstracts related to the pathophysiology, clinical and epidemiological aspects of peptic ulcers and their complications  |
| Esophageal, Gastric & Duodenal Disorders | Portal Hypertension, Complications of Cirrhosis, and GI Bleeding   | Portal hypertension, variceal bleeding, ascites, hepatic encephalopathy, hepatic hydrothorax, portopulmonary hypertension, hepatopulmonary syndrome.   |

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| Esophageal, Gastric & Duodenal Disorders | UGI Bleeding   | Evaluates abstracts concerning the causes, clinical features and/or consequences of upper GI bleeding. It is not intended for abstracts focused on portal hypertension or variceal bleeding   |
| Gastrointestinal Oncology                | Advancements in Population Health Cancer Screening: Gastric, Esophageal, Hepatocellular, Other Cancer Screening                                      | Evaluates abstracts pertaining to cancer screening outside of colorectal cancer screening (note: colorectal cancer screening has its own descriptors). For instance, screening or surveillance for cancers of the stomach, esophagus, liver, or pancreas. Additionally includes population health screening for other health outcomes, such as celiac disease, H. pylori, etc. that can be related to cancer outcomes.            |
| Gastrointestinal Oncology                | Barrett's Esophagus and Esophagogastric Junction Neoplasia - Biology and Fundamental Mechanism   | Evaluates the pathogenesis of Barrett's esophagus and esophagogastric junction neoplasia.   |
| Gastrointestinal Oncology                | Barrett's Esophagus and Esophagogastric Junction Neoplasia - Epidemiology, Risk Factors, Screening and Surveillance, Treatment and Clinical Outcomes | Evaluates abstracts related to diagnosis, management and surveillance of patients with Barrett's esophagus. It is not intended for abstracts directly related to GERD.  |
| Gastrointestinal Oncology                | Biomarkers for Detection, Treatment and Prognosis of GI Cancers  | Research focused on biomarkers used for the detection, treatment, and/or prognosis of GI cancers. Biomarker analysis can be on tissues or serum. Biomarkers can include DNA, RNAs, miRNAs, or proteins. Research can include both clinical and preclinical models of GI cancer.   |
| Gastrointestinal Oncology                | Cancer Prevention and Chemoprevention  | Research focused on cancer prevention or chemoprevention of GI cancers. Research can include both clinical and preclinical models of GI cancer. Innovative cancer prevention techniques, including dietary and lifestyle modification, as well as pharmacologic strategies, are included in this descriptor.  |
| Gastrointestinal Oncology                | Canceromics: Cancer Genomics, Epigenomics, Metabolomics, Proteomics and Systems Biology  | Cancer genomics, epigenomics, metabolomics, proteomics, and systems biology: research focused on genomics (DNA), epigenomics (i.e. methylation, histone modifications), proteomics (protein), and systems biology (i.e. metabolic or cell signaling networks) aimed at the complex interactions in cancer biology. Research can include both clinical and preclinical models of GI cancer.  |
| Gastrointestinal Oncology                | Carcinoid and GI Neuroendocrine Neoplasm: Cell Biology, Genetics, Development, Diagnosis and Clinical Therapeutics                                   | Research focused on gastrointestinal neuroendocrine tumors (NET). Research can include both preclinical (basic) and clinical studies. Research can span basic biology and mechanisms of NET development and progression, the genetic basis of NET, and diagnosis and treatment.   |
| Gastrointestinal Oncology                | Colorectal Cancer Screening and Surveillance: Clinical studies to Improve Uptake, Increase Adherence & Address Racial Disparities                    | Evaluates abstracts examining the impact of racial disparities on colorectal cancer screening and surveillance and including efforts to improve adherence and/or screening outcomes in these populations. In addition, abstracts generally focused on efforts or processes that enhance adherence and uptake of current colon cancer screening and surveillance in populations at large would be appropriate for this descriptor. |
| Gastrointestinal Oncology                | Colorectal Cancer Screening and Surveillance: Cohort, Clinical Outcomes & Comparative Effectiveness Studies including Trials                         | Research focused on epidemiologic studies (cohort and case control), comparative effectiveness/decision analysis modeling, and clinical trials aimed at testing the effectiveness of screening and surveillance strategies for colorectal cancer. This can include both endoscopic and non-invasive screening strategies.   |
| Gastrointestinal Oncology                | Colorectal Cancer Screening and Surveillance: High Risk Populations, Including Hereditary Syndromes, Inflammatory Bowel Disease                      | Research focused on epidemiologic studies (cohort and case control), comparative effectiveness/decision analysis modeling, and clinical trials aimed at evaluating screening and surveillance among individuals with hereditary syndromes and inflammatory bowel disease. This can include both endoscopic and non-invasive screening strategies.   |
| Gastrointestinal Oncology                | Colorectal Cancer Screening and Surveillance: Innovations, New Technology  | Any research involving the use of new technologies or innovations as it pertains to the field of colorectal cancer screening and/or surveillance. Can include technological advances in any aspect including but not limited to endoscopy, radiology, pathology, stool testing, sedation, computer models, patient engagement tools, etc.   |

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| Gastrointestinal Oncology | COVID and GI   | Aims to include clinical and basic studies on mechanisms by which SARS-CoV-2 infects and replicates within human gut enterocytes as well as GI manifestations and outcomes of SARS-CoV-2 infection   |
| Gastrointestinal Oncology | Epidemiology of Gastrointestinal Disorders   | Evaluates abstracts using epidemiologic methods that do not easily fit into other descriptors. Includes studies of risk factors for gastrointestinal disease and trends in disease incidence and outcome. Generally leverages population-level databases.  |
| Gastrointestinal Oncology | Esophageal and Junctional Neoplasms: Precursor Lesions, Biology, Diagnosis and Clinical Therapeutics                             | Precursor Lesions, Biology, Diagnosis and Clinical Therapeutics: research focused on precursors (i.e. Barrett's metaplasia, dysplasia), biology, diagnosis and clinical therapies directed at both esophageal squamous and adenocarcinomas. This focus include the spectrum from basic molecular studies to preclinical and clinical therapies, but not endoscopic therapies.  |
| Gastrointestinal Oncology | Familial Cancer Syndromes and Cancer Genetics  | Research focused on inherited risk factors for cancer, including diagnostics, prevention, and therapeutics. This includes germline gene alterations, epigenetic and imprinted mechanisms, and somatic mutational profiling. Includes any and all inherited syndromes associated with GI cancer risk.   |
| Gastrointestinal Oncology | Gastric Neoplasms: Precursor Lesions, Biology, Diagnosis and Therapy   | Precursor lesions, biology, diagnosis and clinical therapeutics: research focused on precursors (i.e. intestinal metaplasia, dysplasia, MALTs), biology, diagnosis and clinical therapies directed at all types of gastric neoplasms.  |
| Gastrointestinal Oncology | GI Cancer Research Models: Organoids, Engineered Cell and Tissue Platforms, and Animal Models                                    | Organoids, Engineered Cell and Tissue Platforms, and Animal Models: Research in which GI cancer models are the focus, including new transgenic animal models for GI cancers as well as crosses or other modifications that significantly alter the cancer phenotype and provide insight into cancer pathogenesis. It also includes any primary cell culture of tissues from human, murine, or other organisms. Also includes approaches to genetically modify cells including CRISPR and other techniques.   |
| Gastrointestinal Oncology | Health Care Delivery and Policy (Practice Management Including Telehealth & COVID related issues, Reimbursement, Access to Care) | Evaluates abstracts pertaining to business issues of practice (either community or academic), government or insurer policies including analyses of their effects, and access to care. This descriptor is not intended for cost-effectiveness analyses, process improvement, or performance metrics.  |
| Gastrointestinal Oncology | Health Disparities and Global Health   | Evaluates abstracts regarding disparities in health outcomes based on race or socioeconomic status. Also evaluates studies specific to healthcare in developing countries, including epidemiology, delivery of healthcare, and outcomes.   |
| Gastrointestinal Oncology | Inflammation and GI Cancers  | Research focused on inflammatory mechanisms that underlie GI cancer initiation, development, and progression. Research can include sporadic cancer as well as cancers secondary to inflammatory diseases (e.g. inflammatory bowel disease). Can include both preclinical and clinical studies.   |
| Gastrointestinal Oncology | Liver and Biliary Carcinoma: Management, Etiology, Diagnosis and Natural History   | Precursor Lesions, Biology, Diagnosis and Clinical Therapeutics: research focused on precursors (i.e. dysplasia), biology, diagnosis and clinical therapies directed at liver and biliary cancers.   |
| Gastrointestinal Oncology | Metabolism, Obesity, Microbiome, Metabolites, and Nutrition in GI Cancer   | Research focused on the roles played by metabolism, obesity, the microbiome, and nutrition in the initiation and progression of cancers of the gastrointestinal tract. This includes studies exploring these processes promoting carcinogenesis separately or as interacting and inter-related pathways, as well as in-depth studies of molecular pathways. It also includes mechanistic or population studies exploring novel cancer prevention and treatment strategies which modulate a subject's metabolism, obesity, microbiome, and nutritional state, including the use of nutritional supplements. |

2021 AGA Expanded Descriptors

| SECTION  | DESCRIPTOR   | Expanded Descriptor  |
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| Gastrointestinal Oncology                              | Microbiome and Cancer  | Role of the gut microbiome in the initiation and progression of cancers of the gastrointestinal tract and other organ systems. Also the role of gut microbes in cancer prevention and modulation of tumor immunology and metabolism. Mechanisms and mediators that are involved in these processes.  |
| Gastrointestinal Oncology                              | Molecular Mechanisms and Pathways in Carcinogenesis and Metastasis: Bench to Bedside | Research focused on signaling pathways, molecules, receptors, and downstream effectors that regulate key processes in cancer cells, including signaling that drives carcinogenesis, cancer cell survival, and metastasis, as well as other cellular processes. Research can be span from basic molecular research to preclinical studies in cancer models.   |
| Gastrointestinal Oncology                              | Pancreatic and Biliary Disorders: Endoscopy and Imaging                              | Includes any research involving the use of endoscopy or imaging as it pertains to pancreatic and/or biliary disorders.   |
| Gastrointestinal Oncology                              | Pancreatic Cancer: Risk Factors, Biology, Diagnosis and Clinical Therapeutics        | Both clinical and basic science aspects specially with biomarkers can fit in here. Almost all adenocarcinoma abstracts should fit this descriptor although there may be some overlap for cystic neoplasms and cancer with the descriptor PCN, IPMN and neuroendocrine tumors.  |
| Gastrointestinal Oncology                              | Stem Cells in Health, Development, and Malignant Transformation                      | Features investigations of diverse aspects of stem cells, including so-called Cancer Stem Cells, stem cells as cells of origin for cancer, and stem cells in normal homeostasis and regeneration.  |
| Gastrointestinal Oncology                              | Systematic Reviews and Meta-Analysis of Gastrointestinal Disorders                   | Evaluates abstracts using systematic review and meta-analyses that do not fit easily into other descriptors.   |
| Gastrointestinal Oncology                              | Translational and Targeted Therapies for GI Cancers                                  | Research focused on GI cancer therapies, including development of novel targets, innovative reagents and treatments. Includes high through-put screens, research into delivery vehicles including nanoparticles, and includes chemotherapies, biological therapies, irradiation and other treatment modalities.  |
| Gastrointestinal Oncology                              | Tumor Cell Biology, Immunology, and Microenvironment                                 | Research focused on cancer cell biology, including mechanisms of cell proliferation, survival, migration, morphology, metabolism, and gene/protein expression, with a focus on molecular mechanisms responsible for the cancer cell phenotype. This also includes studies of all aspects of the local tissue environment (non-tumor cells, extracellular matrix) influencing cancer cell biology and survival.   |
| GI Fellow-Directed QI Session                          | GI Fellow-Directed QI Session  | Only those currently enrolled in a GI fellowship program can submit abstracts to this descriptor, and the GI fellow MUST be the primary author on the abstract submission. Medical residents are not eligible to submit abstracts to this abstract descriptor category. Abstracts submitted to this category are only eligible for presentation at a special session, focused on quality improvement, sponsored by the Education & Training and Trainee & Early Career Committees of the AGA Institute. Please select GI Fellow-Directed QI Session for your category and subcategory only if submitting for this session. |
| Immunology, Microbiology & Inflammatory Bowel Diseases | Animal Models: Pre-Clinical Treatment of Intestinal Inflammation                     | Studies in animal models that assess potential therapeutic pathways and interventions for IBD.   |
| Immunology, Microbiology & Inflammatory Bowel Diseases | COVID and GI   | Aims to include clinical and basic studies on mechanisms by which SARS-CoV-2 infects and replicates within human gut enterocytes as well as GI manifestations and outcomes of SARS-CoV-2 infection   |
| Immunology, Microbiology & Inflammatory Bowel Diseases | COVID and Interactions with the Microbiome and COVID and Immune Defense              | Considers basic and clinical studies related to COVID and the microbiome (gut, lung, nasal etc) and systemic and local immune responses. Includes changes in microbiome associated with susceptibility, outcomes and prognosis of COVID, the role of microbiome in pathogenesis of COVID for eg. regulating ACE2 receptor expression, modulating mucosal and/or systemic immune responses to COVID, facilitating fecal carriage and transmission, driving extrapulmonary manifestations of COVID etc.  |

2021 AGA Expanded Descriptors

| SECTION  | DESCRIPTOR  | Expanded Descriptor  |
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| Immunology, Microbiology & Inflamm                     | Diarrheal Disorders: Bacterial Overgrowth - Drug Induced and Other Enterocolitides (Microscopic, Enteropathy, Check Point Inhibitors, Etc.) | Aims to feature clinical, epidemiological and basic studies on pathogenesis of diarrheal diseases and other enteropathies including environmental enteropathy, ischemic, toxin, drug induced, allergic, autoimmune, diverticular disease. Consequences or outcomes of these illness would be also included. Also includes clinical and basic studies on novel small molecule and biologic therapeutics, and pre- and probiotics, for the intestinal disorders including diarrhea, irritable bowel, auto immune, environmental enteropathies, drug-induced, and microbial induced intestinal diseases. This descriptor excludes celiac disease, C. difficile and the chronic inflammatory bowel diseases (IBD). |
| Immunology, Microbiology & Inflammatory Bowel Diseases | Health Care Delivery and Policy (Practice Management Including Telehealth & COVID related issues, Reimbursement, Access to Care)            | Evaluates abstracts pertaining to business issues of practice (either community or academic), government or insurer policies including analyses of their effects, and access to care. This descriptor is not intended for cost-effectiveness analyses, process improvement, or performance metrics.  |
| Immunology, Microbiology & Inflammatory Bowel Diseases | Health Disparities and Global Health  | Evaluates abstracts regarding disparities in health outcomes based on race or socioeconomic status. Also evaluates studies specific to healthcare in developing countries, including epidemiology, delivery of healthcare, and outcomes.   |
| Immunology, Microbiology & Inflammatory Bowel Diseases | IBD: Adverse Events Related to Therapy  | Evaluates studies related to complications of medical, surgical and complementary therapies for IBD.   |
| Immunology, Microbiology & Inflammatory Bowel Diseases | IBD: Comparative Effectiveness Studies  | Studies providing a direct comparison of existing health care interventions for IBD to determine best approaches for patients and comparing benefits and harms.  |
| Immunology, Microbiology & Inflammatory Bowel Diseases | IBD: Controlled Clinical Trials in Humans   | Randomized and/or placebo controlled trials of interventions for IBD.  |
| Immunology, Microbiology & Inflammatory Bowel Diseases | IBD: Cytokines, Signaling and Receptors   | Basic or translational studies on cytokines, signaling and receptors and their role in intestinal inflammation as it relates to IBD.   |
| Immunology, Microbiology & Inflammatory Bowel Diseases | IBD: Diagnostics in IBD   | Evaluates tests of blood, stool, imaging, endoscopy or other novel tests for determining presence (diagnosis) of IBD or classification of IBD.   |
| Immunology, Microbiology & Inflammatory Bowel Diseases | IBD: Disease Activity Assessment  | Evaluates tests of blood, stool, imaging, endoscopy, or other novel tests and scoring systems for determining disease severity of IBD including presence of mucosal healing.   |
| Immunology, Microbiology & Inflammatory Bowel Diseases | IBD: Disease Complications  | Studies evaluating adverse outcomes of IBD; Not related to medical or surgical therapy.  |
| Immunology, Microbiology & Inflammatory Bowel Diseases | IBD: Epidemiology   | Studies of the incidence, prevalence and risk factors for IBD.   |
| Immunology, Microbiology & Inflammatory Bowel Diseases | IBD: Genomics and Gene Function   | Basic or translational studies related to genetics, genomics, gene function and other -omics studies and their relationship to basic IBD mechanism's or clinical outcomes.   |
| Immunology, Microbiology & Inflammatory Bowel Diseases | IBD: Innate and Adaptive Host Defenses  | Studies of host defense mechanisms in IBD, focused on immune defenses in IBD, including both adaptive and innate immunity.   |
| Immunology, Microbiology & Inflammatory Bowel Diseases | IBD: Microbiome Role in Intestinal Inflammation   | The role of the microbiome in contributing to intestinal inflammation in IBD.  |
| Immunology, Microbiology & Inflammatory Bowel Diseases | IBD: Natural History and Outcomes   | Studies of the course of IBD including remission, response, hospitalizations, surgeries, steroid courses, complications, and cancer over time in both ulcerative colitis and Crohn's disease   |
| Immunology, Microbiology & Inflammatory Bowel Diseases | IBD: Practice Management, Quality of Care, Quality Assurance  | Studies focusing on the evolution or changing quality of IBD disease behavior or phenotype over time.  |
| Immunology, Microbiology & Inflammatory Bowel Diseases | IBD: Quality of Life and Psychosocial Care  | Evaluates access and effectiveness. Do IBD patients get the care they need, and is the care effective when they get it?  |

2021 AGA Expanded Descriptors

| SECTION  | DESCRIPTOR   | Expanded Descriptor  |
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| Immunology, Microbiology & Inflammatory Bowel Diseases | IBD: Special Populations, Conception, Adolescent, and Older                  | Clinical studies related to male/female fertility, pregnancy outcomes; the adolescent/transitioning patient; and the older patient with IBD. These may be randomized trials, observational, epidemiology and natural history data.   |
| Immunology, Microbiology & Inflammatory Bowel Diseases | IBD: Therapeutic Monitoring  | Evaluates general well-being of individuals and societies with IBD and relationship of QOL with health (physical and mental) and wellness.   |
| Immunology, Microbiology & Inflammatory Bowel Diseases | IBD: Translational Application of Intestinal Stem Cells and Organoid Models  | Evaluates the use and effectiveness of drug levels in IBD.   |
| Immunology, Microbiology & Inflammatory Bowel Diseases | IBD: Uncontrolled Therapeutic Observations in Humans Biologic                | Studies of interesting and relevant findings in individuals receiving monoclonal antibody based therapy for IBD, retrospective case/cohort series, new therapies, and special populations such as the pregnant patient and the elderly.  |
| Immunology, Microbiology & Inflammatory Bowel Diseases | IBD: Uncontrolled Therapeutic Observations in Humans Non-Biologic            | Studies of interesting and relevant findings in individuals receiving medical or surgical therapy (non-biologic) for IBD, retrospective case/cohort series, new therapies, and special populations such as the pregnant patient and the elderly.   |
| Immunology, Microbiology & Inflammatory Bowel Diseases | Intestinal Inflammation, Fibrosis and Regeneration                           | Aims to feature basic studies of intestinal injury by inflammation, radiation or hypoxia, and mechanisms of repair, fibrosis, and stricture formation.   |
| Immunology, Microbiology & Inflammatory Bowel Diseases | Microbial-Based Therapy  | Use of microbiome-based therapy (fecal transplantation and defined microbial communities) in the treatment and prevention of GI and extraintestinal disease. Microbiome-based therapy and functions, mechanisms of action, interactions with endogenous microbiota and host. Bioengineering of new microbiome-based therapy and functions: clinical and regulatory considerations. |
| Immunology, Microbiology & Inflammatory Bowel Diseases | Mucosal Innate Function and Innate Host Defense: Inflammatory Bowel Disease  | Basic and translational studies on mucosal innate immune function and innate host defense - human or animal studies.   |
| Immunology, Microbiology & Inflammatory Bowel Diseases | Non-Immune Cells in Intestinal Inflammation: Epithelium and Stroma           | Studies of the role of the cells of the epithelium and stromal cells (not professional immune cells) in intestinal inflammation.   |
| Immunology, Microbiology & Inflammatory Bowel Diseases | Pediatric IBD: Clinical and Translational Studies                            | Aims to feature clinical and translational studies of inflammatory bowel diseases in pediatric populations.  |
| Immunology, Microbiology & Inflammatory Bowel Diseases | Role of the Gut Microbiome and Pathogens in Immune and Inflammatory Diseases | Gut microbial role in inflammatory diseases of the bowel, including inflammatory bowel diseases, Celiac disease, food allergy, graft-versus-host, Dysmotility, etc. Mediators, mechanisms, and targets of microbial pathogenesis that cause and/or contribute to these diseases.   |
| Immunology, Microbiology & Inflammatory Bowel Diseases | Viral, Eukaryote, and Prokaryote Members of the Gut Microbiome               | Defining members of non-bacterial kingdoms of the gastrointestinal microbiome – their relative importance, function, and interactions with other members of the microbial community and host.  |
| Liver & Biliary  | Alcoholic Liver Disease Including Alcoholic Hepatitis                        | Research abstracts on all aspects of basic, translational, and clinical sciences related to alcoholic liver disease.   |
| Liver & Biliary  | Cholelithiasis and Biliary Tract Disorders                                   | Biliary stones, gallbladder stones, obstructive jaundice.  |
| Liver & Biliary  | Cholestatic and Autoimmune Liver Disease                                     | Primary biliary cholangitis, primary sclerosing cholangitis, autoimmune hepatitis, autoimmune cholangiopathy.  |
| Liver & Biliary  | COVID and Pediatric Hepatology   | The impact of COVID-19 on clinical pediatric hepatology; SARS-CoV-2 infection and effects on the developing liver  |
| Liver & Biliary  | COVID-19: Impact on Chronic Liver Disease                                    | Impact of COVID-19 on clinical presentation and management of acute and chronic liver diseases   |
| Liver & Biliary  | COVID-19: Impact on Training   | Impact of COVID-19 in training in hepatology, including transplant hepatology  |
| Liver & Biliary  | Diagnosis, Biomarkers, and Therapies of Viral Hepatitis                      | Research on all aspects of diagnosis, biomarkers, and treatments for viral hepatitis.  |
| Liver & Biliary  | Epidemiology, Virology, Pathogenesis, and Natural history of Viral Hepatitis | Research on epidemiology, pathogenesis, and natural history of viral hepatitis.  |

2021 AGA Expanded Descriptors

| SECTION                        | DESCRIPTOR   | Expanded Descriptor   |
|--------------------------------|--|---|
| Liver & Biliary                | Extraintestinal Interactions of the Gut Microbiome   | Considers the functional cross-talk between the gut microbiota and extraintestinal organs (excluding nervous system). Microbiota-based mechanisms and therapy in extra-intestinal disease pathogenesis. Organs affected include: liver, pancreas, kidney, lymphoid, cardiovascular, bone, respiratory and mucosal systems. Also, consider extraintestinal control of microbiota composition and function.   |
| Liver & Biliary                | Health Disparities and Global Health   | Evaluates abstracts regarding disparities in health outcomes based on race or socioeconomic status. Also evaluates studies specific to healthcare in developing countries, including epidemiology, delivery of healthcare, and outcomes.  |
| Liver & Biliary                | Health Services Research, Cost Effectiveness, Economic Analysis, Patient Centered Outcomes                                 | Research on Health Services Research, Cost Effectiveness, Economic Analysis, Patient Centered Outcomes.   |
| Liver & Biliary                | Liver and Biliary Carcinoma: Management, Etiology, Diagnosis and Natural History   | Precursor Lesions, Biology, Diagnosis and Clinical Therapeutics: research focused on precursors (i.e. dysplasia), biology, diagnosis and clinical therapies directed at liver and biliary cancers.  |
| Liver & Biliary                | Liver and Biliary Tract Carcinoma (Hepatobiliary Neoplasia)  | Research on bile duct cancer and cholangiocarcinoma.  |
| Liver & Biliary                | Liver Transplantation  | Complications of liver transplantation, outcomes of liver transplantation, disease recurrence after liver transplantation.  |
| Liver & Biliary                | Metabolic and Genetic Liver Diseases   | Research on genetic liver diseases including hemochromatosis, Alpha-1-antitrypsin deficiency, Wilson Disease, Cystic fibrosis.  |
| Liver & Biliary                | Molecular Mechanisms of Growth and Development of the GI Tract, Liver and Pancreas   | Basic cellular mechanisms driving the establishment, development, and function of the digestive organs. Pathways driving cellular differentiation and organ maturation.   |
| Liver & Biliary                | Non-Alcoholic Fatty Liver Diseases (NAFLD) and Non-Alcoholic Steatohepatitis (NASH)  | Research abstracts on all aspects of basic, translational, and clinical sciences related to non-alcoholic fatty liver disease and NASH.   |
| Liver & Biliary                | Non-Invasive Assessment of Liver Disease   | Serum biomarkers, elastography, APRI, FIB-4, ELF, Fibrosure, FibroSpec .  |
| Liver & Biliary                | Pancreatic and Biliary Disorders: Endoscopy and Imaging  | Includes any research involving the use of endoscopy or imaging as it pertains to pancreatic and/or biliary disorders.  |
| Liver & Biliary                | Portal Hypertension, Complications of Cirrhosis, and GI Bleeding   | Portal hypertension, variceal bleeding, ascites, hepatic encephalopathy, hepatic hydrothorax, portopulmonary hypertension, hepatopulmonary syndrome.  |
| Liver & Biliary                | Telehealth: management of viral hepatitis (HCV and HBV) and Complex Liver Disease Patient (Pre- and Post-Liver Transplant) | Use of Telehealth for management of viral hepatitis and complex liver diseases including NASH, decompensated cirrhosis, and liver transplantation   |
| Microbiome & Microbial Therapy | Clostridioides difficile Colitis: Pathogenesis, Diagnosis, Management and Therapy  | Diagnosis, management and treatment of C. difficile infection (CDI). Host-microbial crosstalk in CDI susceptibility. Microbial and Biotic-based therapy for CDI. CDI pathogenesis (excluding toxin virulence mechanism).  |
| Microbiome & Microbial Therapy | COVID and GI   | Aims to include clinical and basic studies on mechanisms by which SARS-CoV-2 infects and replicates within human gut enterocytes as well as GI manifestations and outcomes of SARS-CoV-2 infection  |
| Microbiome & Microbial Therapy | COVID and Interactions with the Microbiome and COVID and Immune Defense  | Considers basic and clinical studies related to COVID and the microbiome (gut, lung, nasal etc) and systemic and local immune responses. Includes changes in microbiome associated with susceptibility, outcomes and prognosis of COVID, the role of microbiome in pathogenesis of COVID for eg. regulating ACE2 receptor expression, modulating mucosal and/or systemic immune responses to COVID, facilitating fecal carriage and transmission, driving extrapulmonary manifestations of COVID etc. |
| Microbiome & Microbial Therapy | COVID: SARS-CoV-2 Cellular and Molecular Interactions with Digestive Organs  | Features basic science related to SARS-CoV-2 interaction with the GI tract and/or of COVID-19 effects on GI organs  |

2021 AGA Expanded Descriptors

| SECTION                        | DESCRIPTOR   | Expanded Descriptor  |
|--------------------------------|--|--|
| Microbiome & Microbial Therapy | Diarrheal Disorders: Bacterial Overgrowth - Drug Induced and Other Enterocolitides (Microscopic, Enteropathy, Check Point Inhibitors, Etc.)  | Aims to feature clinical, epidemiological and basic studies on pathogenesis of diarrheal diseases and other enteropathies including environmental enteropathy, ischemic, toxin, drug induced, allergic, autoimmune, diverticular disease. Consequences or outcomes of these illness would be also included. Also includes clinical and basic studies on novel small molecule and biologic therapeutics, and pre- and probiotics, for the intestinal disorders including diarrhea, irritable bowel, auto immune, environmental enteropathies, drug-induced, and microbial induced intestinal diseases. This descriptor excludes celiac disease, C. difficile and the chronic inflammatory bowel diseases (IBD). |
| Microbiome & Microbial Therapy | Diet and the Gut Microbiome  | Dietary impact on the composition and function of the gut microbiome and how their effects alter host-microbe interactions in conditions of health and disease. Microbial strains, mechanisms, mediators, and pathways that are involved in dietary effects on host and microbe. The role and actions of specific dietary components in affecting the gut microbiome. Clinical trials and studies of dietary intervention to reshape the gut microbiome as interventions for diseases and/or maintenance of health.  |
| Microbiome & Microbial Therapy | Enteric Sensation in Health and Disease (Including Visceral Pain, Neuroimmunology, Epithelial Junctions, Intestinal Barrier Function/Dysfunction and Interactions with the Microbiome) | Evaluates abstracts pertaining to basic visceral pain, microbiome, neuromediators, neurotransmitters, neurogenic Inflammation, pain, viscerovisceral cross talk, gut microbiota, visceral hypersensitivity.  |
| Microbiome & Microbial Therapy | Extraintestinal Interactions of the Gut Microbiome   | Considers the functional cross-talk between the gut microbiota and extraintestinal organs (excluding nervous system). Microbiota-based mechanisms and therapy in extra-intestinal disease pathogenesis. Organs affected include: liver, pancreas, kidney, lymphoid, cardiovascular, bone, respiratory and mucosal systems. Also, consider extraintestinal control of microbiota composition and function.  |
| Microbiome & Microbial Therapy | Food Intolerances, Allergy, and Sensitivities  | Disaccharide deficiencies, lactose, fructose or other food intolerances or sensitivities would be included and GI manifestations of food allergies. Studies that pertain to histamines or other responses to foods or dietary changes would also come under this descriptor. The interaction between microbiome and diet, in particular, where it relates to disease or gastrointestinal function/dysfunction would also come under this descriptor.   |
| Microbiome & Microbial Therapy | Health Disparities and Global Health   | Evaluates abstracts regarding disparities in health outcomes based on race or socioeconomic status. Also evaluates studies specific to healthcare in developing countries, including epidemiology, delivery of healthcare, and outcomes.   |
| Microbiome & Microbial Therapy | IBD: Microbiome Role in Intestinal Inflammation  | The role of the microbiome in contributing to intestinal inflammation in IBD.  |
| Microbiome & Microbial Therapy | Intestinal Inflammation, Fibrosis and Regeneration   | Aims to feature basic studies of intestinal injury by inflammation, radiation or hypoxia, and mechanisms of repair, fibrosis, and stricture formation.   |
| Microbiome & Microbial Therapy | Metabolism, Obesity, Microbiome, Metabolites, and Nutrition in GI Cancer   | Research focused on the roles played by metabolism, obesity, the microbiome, and nutrition in the initiation and progression of cancers of the gastrointestinal tract. This includes studies exploring these processes promoting carcinogenesis separately or as interacting and inter-related pathways, as well as in-depth studies of molecular pathways. It also includes mechanistic or population studies exploring novel cancer prevention and treatment strategies which modulate a subject's metabolism, obesity, microbiome, and nutritional state, including the use of nutritional supplements.   |
| Microbiome & Microbial Therapy | Microbial Dysbiosis: Causes and Consequences   | Compositional and functional alterations of the gastrointestinal microbiome that disturb host function, physiology, and cause or contribute to the risk/development/natural history of diseases that affect the GI tract and other organ systems. Environmental, dietary, microbial, and host factors that result in the development of gut dysbiosis.   |

2021 AGA Expanded Descriptors

| SECTION                        | DESCRIPTOR   | Expanded Descriptor   |
|--------------------------------|--|---|
| Microbiome & Microbial Therapy | Microbial Pathogens and Toxins of the Intestine and Colon                            | Aims to feature studies on microbial pathogenesis for enterotoxins and bacterial, viral, fungal infections of gut - excluding C. Diff toxin induced disease.  |
| Microbiome & Microbial Therapy | Microbial Regulation of Host Metabolic and Energy Homeostasis                        | The role and mediators gut microbial regulation of host energy balance, digestion and absorption, circadian rhythm, and other metabolic targets and organs. Microbial role in obesity, metabolic syndrome, Type 2 diabetes, non-alcoholic liver disease, cardio-vascular complications, malabsorption, and malnutrition. Impact of these diseases on gut microbial function and composition.  |
| Microbiome & Microbial Therapy | Microbial-Based Therapy  | Use of microbiome-based therapy (fecal transplantation and defined microbial communities) in the treatment and prevention of GI and extraintestinal disease. Microbiome-based therapy and functions, mechanisms of action, interactions with endogenous microbiota and host. Bioengineering of new microbiome-based therapy and functions: clinical and regulatory considerations.  |
| Microbiome & Microbial Therapy | Microbiome and Cancer  | Role of the gut microbiome in the initiation and progression of cancers of the gastrointestinal tract and other organ systems. Also the role of gut microbes in cancer prevention and modulation of tumor immunology and metabolism. Mechanisms and mediators that are involved in these processes.   |
| Microbiome & Microbial Therapy | Microbiome and Infectious Diseases   | Pathogens and pathogenic virulence mechanisms that affect the gut microbiome and cause infectious diseases (viral, fungal, parasitic, bacterial, excluding C. difficile infection). Alternations in genomics and function of commensal microbes that lead to negative, disease-causing consequences. Perturbations or aberrant host functions that lead to altered gut microbial function that can promote infectious diseases.       |
| Microbiome & Microbial Therapy | Non-Alcoholic Fatty Liver Diseases (NAFLD) and Non-Alcoholic Steatohepatitis (NASH)  | Research abstracts on all aspects of basic, translational, and clinical sciences related to non-alcoholic fatty liver disease and NASH.   |
| Microbiome & Microbial Therapy | Pediatric Microbiome and Microbial Therapies   | The roles and mechanisms of gut microbes in influencing host metabolism, immunity, growth and development, etc. during the neonatal, childhood, and adolescent periods. The impact of dysbiosis on disease risk and outcomes later in life. Host factors that determine the compositional and functional development of gut microbiomes in pediatric populations.   |
| Microbiome & Microbial Therapy | Prebiotics, Probiotics and Synbiotics in Health and Disease                          | Use of prebiotics, probiotics, postbiotics and synbiotics (biotics) in the treatment and prevention of GI and extraintestinal disease. Biotic functions, mechanisms of action and interactions with the endogenous microbiome and host. Bioengineering new biotic functions. Biotic clinical and regulatory considerations.   |
| Microbiome & Microbial Therapy | Role of the Gut Microbiome and Pathogens in Immune and Inflammatory Diseases         | Gut microbial role in inflammatory diseases of the bowel, including inflammatory bowel diseases, Celiac disease, food allergy, graft-versus-host, Dysmotility, etc. Mediators, mechanisms, and targets of microbial pathogenesis that cause and/or contribute to these diseases.  |
| Microbiome & Microbial Therapy | The Gastrointestinal Microbiome: Determinants and Dynamics of Structure and Function | The mechanisms and mediators of dietary, environmental, host, and intracommunity microbial factors that shape the regional gastrointestinal microbiomes. The interplay of all these factors in determining microbial assemblage of individuals in both physiological and pathophysiological conditions.   |
| Microbiome & Microbial Therapy | The Microbiome in Pancreatic Diseases  | Considers emerging work in microbiome and pancreatic diseases in human studies and animal models including effects of pancreatic diseases on the microbiome composition and function, as well as the effects of the microbiome and microbial metabolites on pancreatic diseases including acute and chronic pancreatitis, autoimmune pancreatitis, pancreatic cysts, pancreatic cancer and associated complications such as diabetes. |

2021 AGA Expanded Descriptors

| SECTION                          | DESCRIPTOR   | Expanded Descriptor  |
|----------------------------------|--|--|
| Microbiome & Microbial Therapy   | The Microbiome-Gut-Brain Axis in Health and Disease  | Functional cross-talk between the gut microbiota and the host nervous system (central and peripheral). Microbial neuroendocrinology in GI and extraintestinal disease. Microbial and biotic-based therapy: mechanisms of action and regulation of neuropathy, behavioral and autism spectrum disorders, functional bowel disease and abdominal pain, allergy, inflammatory and infectious disease. Nervous system control of microbiota composition and function.  |
| Microbiome & Microbial Therapy   | Viral, Eukaryote, and Prokaryote Members of the Gut Microbiome   | Defining members of non-bacterial kingdoms of the gastrointestinal microbiome – their relative importance, function, and interactions with other members of the microbial community and host.  |
| Neurogastroenterology & Motility | Anorectal Dysmotility (Including Fecal Incontinence, Dyssynergia and Pelvic Floor Disorders)   | Evaluates abstracts pertaining to high resolution anorectal manometry, disordered/dyssynergic defecation, fecal incontinence, proctalgia, anal sphincter dysfunction, rectal hyposensitivity and hypersensitivity, biofeedback therapy, anorectal surgery, rectocele, prolapse, barostat, anal Endoflip.   |
| Neurogastroenterology & Motility | Brain-Gut Axis (Including Neuroimaging, Vagal Pathways and Neurobiology of Satiety, Obesity and Metabolic Disorders)   | Evaluates abstracts pertaining to functional brain imaging, cortical evoked potentials, obesity, satiety, metabolomics, neural pathways, vagus nerve stimulation, vagal afferent neurons, ascending and descending brain-gut pathways and functional GI disorders.   |
| Neurogastroenterology & Motility | Constipation and Other Functional Colonic Syndromes  | Evaluates abstracts related to the epidemiology, pathogenesis, diagnosis and management of chronic constipation, including opioid-induced constipation. It does not include constipation due to anorectal dysmotility.   |
| Neurogastroenterology & Motility | Diarrheal Disorders: Bacterial Overgrowth - Drug Induced and Other Enterocolitides (Microscopic, Enteropathy, Check Point Inhibitors, Etc.)  | Aims to feature clinical, epidemiological and basic studies on pathogenesis of diarrheal diseases and other enteropathies including environmental enteropathy, ischemic, toxin, drug induced, allergic, autoimmune, diverticular disease. Consequences or outcomes of these illness would be also included. Also includes clinical and basic studies on novel small molecule and biologic therapeutics, and pre- and probiotics, for the intestinal disorders including diarrhea, irritable bowel, auto immune, environmental enteropathies, drug-induced, and microbial induced intestinal diseases. This descriptor excludes celiac disease, C. difficile and the chronic inflammatory bowel diseases (IBD). |
| Neurogastroenterology & Motility | Enteric Neuromuscular Biology: Cell and Molecular Biology (Including Neurons, Glia, ICC, Smooth Muscle, Stem Cells & Development, Pharmacology)  | Evaluates abstracts pertaining to basic visceral pain, microbiome, neuromediators, neurotransmitters, neurogenic Inflammation, pain, viscerovisceral cross talk, gut microbiota, visceral hypersensitivity.  |
| Neurogastroenterology & Motility | Enteric Sensation in Health and Disease (Including Visceral Pain, Neuroimmunology, Epithelial Junctions, Intestinal Barrier Function/Dysfunction and Interactions with the Microbiome) | Evaluates abstracts pertaining to basic visceral pain, microbiome, neuromediators, neurotransmitters, neurogenic Inflammation, pain, viscerovisceral cross talk, gut microbiota, visceral hypersensitivity.  |
| Neurogastroenterology & Motility | Functional Dyspepsia, Nausea and Vomiting  | Evaluates abstracts pertaining to abdominal pain, nausea, functional dyspepsia, non ulcer dyspepsia, psychological distress, pathophysiologic distress, vomiting, rumination, cyclical vomiting syndrome, cannabis hyperemesis syndrome, epigastric pain syndrome, postprandial distress syndrome.   |
| Neurogastroenterology & Motility | Gastroparesis and Small Intestinal Dysmotility   | Evaluates abstracts pertaining to diabetic & non-diabetic gastroparesis, methods to assess gastric emptying and small bowel motility, pathophysiology of gastric and small bowel dysmotility and treatment of these disorders.   |
| Neurogastroenterology & Motility | Irritable Bowel Syndrome: Clinical   | Aims to feature clinical studies on pathogenesis, diagnosis, disease outcome, treatment, disease progression of Irritable Bowel Syndrome.  |
| Neurogastroenterology & Motility | Irritable Bowel Syndrome: Pathophysiology  | Evaluates abstracts that focus on basic (preclinical) and translational studies including pathogenesis, diagnosis and disease progression of Irritable Bowel Syndrome.   |
| Neurogastroenterology & Motility | Oropharyngeal and Esophageal Motility Disorders  | Evaluates abstracts related to the diagnosis and management of oropharyngeal and esophageal motility disorders. It is not intended for abstracts related to GERD or EoE.   |

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| SECTION                          | DESCRIPTOR   | Expanded Descriptor   |
|----------------------------------|--|---|
| Neurogastroenterology & Motility | Pediatric Functional and Motility Disorders                | Aims to feature clinical and translational studies of functional and motility disorders in pediatric populations.   |
| Neurogastroenterology & Motility | Psychogastroenterology & Behavioral Interventions          | Evaluates abstracts pertaining to 1) behavioral, psychological or social determinants of gastrointestinal health and/or 2) the evaluation and/or implementation of brain-based interventions for the management of disorders of gut-brain interaction/functional gastrointestinal disorders, gastrointestinal motility disorders, inflammatory bowel diseases and disordered eating.  |
| Neurogastroenterology & Motility | The Microbiome-Gut-Brain Axis in Health and Disease        | Functional cross-talk between the gut microbiota and the host nervous system (central and peripheral). Microbial neuroendocrinology in GI and extraintestinal disease. Microbial and biotic-based therapy: mechanisms of action and regulation of neuropathy, behavioral and autism spectrum disorders, functional bowel disease and abdominal pain, allergy, inflammatory and infectious disease. Nervous system control of microbiota composition and function.   |
| Obesity, Metabolism & Nutrition  | Celiac Disease and Gluten Related Disorders                | Aims to include studies on the immunology and cellular/tissue pathogenesis of celiac disease and gluten sensitivity including human, translational, basic in vitro cell and tissue models, genetic, and in vivo animal studies. Genetic studies which involve the elucidation of the mechanism or genetic factors that contribute to immunopathogenesis of celiac disease are included in this descriptor. Also included are large population studies that address genetics, prevalence of celiac disease in adults or children, comparative studies of risk, and differences in populations or secular trends. |
| Obesity, Metabolism & Nutrition  | COVID and GI   | Aims to include clinical and basic studies on mechanisms by which SARS-CoV-2 infects and replicates within human gut enterocytes as well as GI manifestations and outcomes of SARS-CoV-2 infection  |
| Obesity, Metabolism & Nutrition  | COVID and Pediatric GI and Nutrition                       | The impact of COVID-19 on clinical pediatric gastroenterology; the effects of COVID-19 on nutritional practice; SARS-CoV-2 infection and effects on the developing gastrointestinal tract.  |
| Obesity, Metabolism & Nutrition  | COVID-19 and Obesity, Metabolism and Nutrition             | Basic, epidemiological, clinical studies regarding COVID-19 risks, outcomes, pathophysiological mechanisms in obesity, metabolic disorder, or response to nutrition-related interventions in patients with patients with SARS-CoV2 infection.   |
| Obesity, Metabolism & Nutrition  | Diet and the Gut Microbiome                                | Dietary impact on the composition and function of the gut microbiome and how their effects alter host-microbe interactions in conditions of health and disease. Microbial strains, mechanisms, mediators, and pathways that are involved in dietary effects on host and microbe. The role and actions of specific dietary components in affecting the gut microbiome. Clinical trials and studies of dietary intervention to reshape the gut microbiome as interventions for diseases and/or maintenance of health.   |
| Obesity, Metabolism & Nutrition  | Dietary Therapies for GI Disorders                         | Basic science mechanisms, clinical trials, epidemiological studies, or data synthesis of food-based trials in patients with gastrointestinal disorders.   |
| Obesity, Metabolism & Nutrition  | Epithelial Function and Ion, Water and Nutrient Absorption | Research focused on epithelial transport including mechanisms, roles of various components, downstream effect of dys-regulated transport.   |
| Obesity, Metabolism & Nutrition  | Food Intolerances, Allergy, and Sensitivities              | Disaccharide deficiencies, lactose, fructose or other food intolerances or sensitivities would be included and GI manifestations of food allergies. Studies that pertain to histamines or other responses to foods or dietary changes would also come under this descriptor. The interaction between microbiome and diet, in particular, where it relates to disease or gastrointestinal function/dysfunction would also come under this descriptor.  |
| Obesity, Metabolism & Nutrition  | Health Disparities and Global Health                       | Evaluates abstracts regarding disparities in health outcomes based on race or socioeconomic status. Also evaluates studies specific to healthcare in developing countries, including epidemiology, delivery of healthcare, and outcomes.  |

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| SECTION                         | DESCRIPTOR  | Expanded Descriptor  |
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| Obesity, Metabolism & Nutrition | Intestinal Failure and Short Gut: Basic and Clinical                                | Basic and clinical studies of intestinal failure, such as that due to short bowel syndrome and IBD, and therapeutic approaches to nutritional support, prevention of complications and facilitation of bowel adaptation and advancement of enteral nutrition.  |
| Obesity, Metabolism & Nutrition | Malabsorption Disorders   | Basic science, translational, and clinical studies of the etiology, pathogenesis, diagnostics or therapy of malabsorptive disorders.   |
| Obesity, Metabolism & Nutrition | Metabolism, Obesity, Microbiome, Metabolites, and Nutrition in GI Cancer            | Research focused on the roles played by metabolism, obesity, the microbiome, and nutrition in the initiation and progression of cancers of the gastrointestinal tract. This includes studies exploring these processes promoting carcinogenesis separately or as interacting and inter-related pathways, as well as in-depth studies of molecular pathways. It also includes mechanistic or population studies exploring novel cancer prevention and treatment strategies which modulate a subject's metabolism, obesity, microbiome, and nutritional state, including the use of nutritional supplements. |
| Obesity, Metabolism & Nutrition | Microbial Regulation of Host Metabolic and Energy Homeostasis                       | The role and mediators gut microbial regulation of host energy balance, digestion and absorption, circadian rhythm, and other metabolic targets and organs. Microbial role in obesity, metabolic syndrome, Type 2 diabetes, non-alcoholic liver disease, cardio-vascular complications, malabsorption, and malnutrition. Impact of these diseases on gut microbial function and composition.   |
| Obesity, Metabolism & Nutrition | Non-Alcoholic Fatty Liver Diseases (NAFLD) and Non-Alcoholic Steatohepatitis (NASH) | Research abstracts on all aspects of basic, translational, and clinical sciences related to non-alcoholic fatty liver disease and NASH.  |
| Obesity, Metabolism & Nutrition | Nutritional Support: Enteral and Parenteral   | Studies of techniques, formulations and complications of the use of enteral and parenteral nutritional support for the treatment of GI diseases.   |
| Obesity, Metabolism & Nutrition | Obesity: Basic and Mechanistic Studies  | Basic studies of the normal physiologic regulation of mechanisms contributing to body mass and metabolic state, as well as perturbations that occur in obesity and diabetes. Includes basic studies of mechanisms by which obesity and its metabolic complications are ameliorated by bariatric surgery and other therapeutic approaches.  |
| Obesity, Metabolism & Nutrition | Obesity: Clinical   | Clinical studies of new therapeutic approaches to obesity and its complications, including nutritional and lifestyle interventions, bariatric surgical and non-surgical approaches, and pharmacotherapy.   |
| Obesity, Metabolism & Nutrition | Obesity: Endoscopic and Surgical Therapies  | Studies of the use of bariatric surgical techniques, such as sleeve gastrectomy, as well as new endoscopic non-surgical approaches, including balloons and other devices, and their associated techniques, indications, complications, effectiveness and post-procedure metabolic changes in the treatment of obesity and diabetes.  |
| Obesity, Metabolism & Nutrition | Obesity: Life-Style and Pharmacological Therapies                                   | Basic and clinical studies on lifestyle intervention modalities (dietary, exercise, behavioral, cognitive) and pharmacotherapy for obesity.  |
| Obesity, Metabolism & Nutrition | Obesity: Pre-Clinical and Epidemiological Studies                                   | Pre-clinical and population-based studies addressing the pathophysiology and clinical features of human obesity and its complications, as well as mechanisms and effectiveness of therapeutic interventions.   |
| Obesity, Metabolism & Nutrition | Pediatric Nutrition and Obesity   | Studies of the metabolic abnormalities and morbidities associated with obesity in children, including metabolic syndrome and NAFLD, and their relationship to nutrition and genetics. Also, studies of approaches to the treatment of pediatric obesity, including the roles of nutritional intervention, lifestyle changes, pharmacotherapy and bariatric surgery.  |
| Obesity, Metabolism & Nutrition | Regulation of Food Intake, Energy Expenditure and Metabolic Function                | Basic and clinical studies of brain and gastrointestinal signaling networks that regulate caloric intake, energy expenditure and metabolic function and the perturbations that occur in disease states, including obesity and diabetes.  |

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| SECTION  | DESCRIPTOR  | Expanded Descriptor   |
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| Obesity, Metabolism & Nutrition                    | Vitamins and Micronutrients: Basic and Clinical                               | Basic and clinical studies of vitamins and micronutrients, including requirements and intestinal absorption in health and disease, transporter function and regulation, nutritional biology, metabolism and deficiency states.  |
| Pancreatic Disorders                               | Clinical Acute Pancreatitis   | Considers epidemiology, etiology, severity prediction as well as medical, endoscopic and other minimally invasive management on outcomes. There is a separate basic science descriptor for basic science work in acute pancreatitis and not this one.   |
| Pancreatic Disorders                               | Clinical Chronic Pancreatitis   | Considers clinical work in chronic pancreatitis including epidemiology, etiology, biomarkers, early and routine diagnosis, tests for exocrine insufficiency, enzyme replacement therapy, all treatments, type 3c diabetes clinical aspects.   |
| Pancreatic Disorders                               | Exocrine Pancreatic Diseases and Diabetes                                     | Considers research into the diagnosis and management of endocrine and exocrine function in pancreatic disease   |
| Pancreatic Disorders                               | Health Disparities and Global Health  | Evaluates abstracts regarding disparities in health outcomes based on race or socioeconomic status. Also evaluates studies specific to healthcare in developing countries, including epidemiology, delivery of healthcare, and outcomes.  |
| Pancreatic Disorders                               | Pancreatic and Biliary Disorders: Endoscopy and Imaging                       | Includes any research involving the use of endoscopy or imaging as it pertains to pancreatic and/or biliary disorders.  |
| Pancreatic Disorders                               | Pancreatic Cancer: Risk Factors, Biology, Diagnosis and Clinical Therapeutics | Both clinical and basic science aspects specially with biomarkers can fit in here. Almost all adenocarcinoma abstracts should fit this descriptor although there may be some overlap for cystic neoplasms and cancer with the descriptor PCN, IPMN and neuroendocrine tumors.   |
| Pancreatic Disorders                               | Pancreatic Cystic Neoplasms, IPMN and Neuroendocrine Tumors                   | This section is completely clinical for these 3 areas and any basic science work should be submitted to one of the 5 basic science descriptors. However, the imaging and endoscopy abstracts of these 3 diseases are encouraged to be submitted to the endoscopy and imaging descriptor.  |
| Pancreatic Disorders                               | Pancreatic Genetics, Epigenetics, Physiology, Cell Biology and Pathobiology   | Considers research in mechanisms of disease initiation and promotion.   |
| Pancreatic Disorders                               | Pancreatitis: Inflammation, Fibrogenesis and Immunology                       | This is an avenue for the basic work exclusively in both acute and chronic pancreatitis regardless of the type.   |
| Pancreatic Disorders                               | The Microbiome in Pancreatic Diseases   | Considers emerging work in microbiome and pancreatic diseases in human studies and animal models including effects of pancreatic diseases on the microbiome composition and function, as well as the effects of the microbiome and microbial metabolites on pancreatic diseases including acute and chronic pancreatitis, autoimmune pancreatitis, pancreatic cysts, pancreatic cancer and associated complications such as diabetes. |
| Pediatric Gastroenterology & Developmental Biology | Clinical Pediatric Gastroenterology   | Aims to feature clinical studies on a variety of pediatric gastrointestinal disorders that do not include inflammatory bowel disease, liver, biliary, functional or motility disorders. This can include, but is not limited to, celiac disease, pancreatic conditions, enteropathies, eosinophilic disorders and malabsorption.  |
| Pediatric Gastroenterology & Developmental Biology | COVID and GI  | Aims to include clinical and basic studies on mechanisms by which SARS-CoV-2 infects and replicates within human gut enterocytes as well as GI manifestations and outcomes of SARS-CoV-2 infection  |
| Pediatric Gastroenterology & Developmental Biology | COVID and Pediatric GI and Nutrition  | The impact of COVID-19 on clinical pediatric gastroenterology; the effects of COVID-19 on nutritional practice; SARS-CoV-2 infection and effects on the developing gastrointestinal tract.  |
| Pediatric Gastroenterology & Developmental Biology | COVID and Pediatric Hepatology  | The impact of COVID-19 on clinical pediatric hepatology; SARS-CoV-2 infection and effects on the developing liver   |
| Pediatric Gastroenterology & Developmental Biology | COVID: SARS-CoV-2 Cellular and Molecular Interactions with Digestive Organs   | Features basic science related to SARS-CoV-2 interaction with the GI tract and/or of COVID-19 effects on GI organs  |

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| SECTION  | DESCRIPTOR   | Expanded Descriptor  |
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| Pediatric Gastroenterology & Developmental Biology | Development of the Enteric Nervous System  | Aims to feature clinical, epidemiological and basic studies on pathogenesis of diarrheal diseases and other enteropathies including environmental enteropathy, ischemic, toxin, drug induced, allergic, autoimmune, diverticular disease. Consequences or outcomes of these illness would be also included. Also includes clinical and basic studies on novel small molecule and biologic therapeutics, and pre- and probiotics, for the intestinal disorders including diarrhea, irritable bowel, auto immune, environmental enteropathies, drug-induced, and microbial induced intestinal diseases. This descriptor excludes celiac disease, C. difficile and the chronic inflammatory bowel diseases (IBD). |
| Pediatric Gastroenterology & Developmental Biology | Developmental Biology, Growth, and Aging in the GI Tract   | Development, maturation, and change over the lifespan of the digestive organs. Mechanisms and regulation of normal turnover/renewal in the gut. Hoe positional cues, stromal signals, and the microenvironment affect cell maturation.   |
| Pediatric Gastroenterology & Developmental Biology | Food Intolerances, Allergy, and Sensitivities  | Disaccharide deficiencies, lactose, fructose or other food intolerances or sensitivities would be included and GI manifestations of food allergies. Studies that pertain to histamines or other responses to foods or dietary changes would also come under this descriptor. The interaction between microbiome and diet, in particular, where it relates to disease or gastrointestinal function/dysfunction would also come under this descriptor.   |
| Pediatric Gastroenterology & Developmental Biology | Genetics and Gastrointestinal Disorders  | Aims to feature clinical and basic studies on mono-genetic intestinal diseases and intestinal failure.   |
| Pediatric Gastroenterology & Developmental Biology | Health Care Delivery and Policy (Practice Management Including Telehealth & COVID related issues, Reimbursement, Access to Care) | Evaluates abstracts pertaining to business issues of practice (either community or academic), government or insurer policies including analyses of their effects, and access to care. This descriptor is not intended for cost-effectiveness analyses, process improvement, or performance metrics.  |
| Pediatric Gastroenterology & Developmental Biology | Health Disparities and Global Health   | Evaluates abstracts regarding disparities in health outcomes based on race or socioeconomic status. Also evaluates studies specific to healthcare in developing countries, including epidemiology, delivery of healthcare, and outcomes.   |
| Pediatric Gastroenterology & Developmental Biology | IBD: Special Populations, Conception, Adolescent, and Older  | Clinical studies related to male/female fertility, pregnancy outcomes; the adolescent/transitioning patient; and the older patient with IBD. These may be randomized trials, observational, epidemiology and natural history data.   |
| Pediatric Gastroenterology & Developmental Biology | In Vivo Models of Gastrointestinal Disorders   | Features studies of GI diseases using animal models.   |
| Pediatric Gastroenterology & Developmental Biology | Molecular Mechanisms of Growth and Development of the GI Tract, Liver and Pancreas   | Basic cellular mechanisms driving the establishment, development, and function of the digestive organs. Pathways driving cellular differentiation and organ maturation.  |
| Pediatric Gastroenterology & Developmental Biology | Organoid Models of Gastrointestinal Disorders  | Features studies of gastrointestinal function or disease using organoids.  |
| Pediatric Gastroenterology & Developmental Biology | Pediatric Functional and Motility Disorders  | Aims to feature clinical and translational studies of functional and motility disorders in pediatric populations.  |
| Pediatric Gastroenterology & Developmental Biology | Pediatric IBD: Clinical and Translational Studies  | Aims to feature clinical and translational studies of inflammatory bowel diseases in pediatric populations.  |
| Pediatric Gastroenterology & Developmental Biology | Pediatric Microbiome and Microbial Therapies   | The roles and mechanisms of gut microbes in influencing host metabolism, immunity, growth and development, etc. during the neonatal, childhood, and adolescent periods. The impact of dysbiosis on disease risk and outcomes later in life. Host factors that determine the compositional and functional development of gut microbiomes in pediatric populations.  |

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| SECTION  | DESCRIPTOR  | Expanded Descriptor   |
|--|---|---|
| Pediatric Gastroenterology & Developmental Biology | Pediatric Nutrition and Obesity   | Studies of the metabolic abnormalities and morbidities associated with obesity in children, including metabolic syndrome and NAFLD, and their relationship to nutrition and genetics. Also, studies of approaches to the treatment of pediatric obesity, including the roles of nutritional intervention, lifestyle changes, pharmacotherapy and bariatric surgery. |
| Pediatric Gastroenterology & Developmental Biology | Pediatric Pancreatic, Liver and Biliary Diseases                              | Aims to feature clinical and translation studies focused on pediatric pancreatic, liver and biliary diseases.   |
| Pediatric Gastroenterology & Developmental Biology | Prebiotics, Probiotics and Synbiotics in Health and Disease                   | Use of prebiotics, probiotics, postbiotics and synbiotics (biotics) in the treatment and prevention of GI and extraintestinal disease. Biotic functions, mechanisms of action and interactions with the endogenous microbiome and host. Bioengineering new biotic functions. Biotic clinical and regulatory considerations.   |
| Pediatric Gastroenterology & Developmental Biology | Stem Cells in Health, Development, and Malignant Transformation               | Features investigations of diverse aspects of stem cells, including so-called Cancer Stem Cells, stem cells as cells of origin for cancer, and stem cells in normal homeostasis and regeneration.   |
| Pediatric Gastroenterology & Developmental Biology | Tissue Engineering and Regenerative Medicine                                  | Cutting-edge techniques for refining, growing, and expanding engineered GI tract, liver, and pancreas tissues for replacement or augmentation of compromised organs in patients.  |
| Pediatric Gastroenterology & Developmental Biology | Transcriptional, Epigenetic and Genetic Regulation of GI Function and Disease | Aims to feature studies on gene expression, gene regulation, and gene suppression leading to gastrointestinal disease, including mechanisms by alterations of chromatin structure.  |