

## Topic Area Descriptions

### Adolescent Medicine

Abstracts should be relevant to and involve adolescents and young adults age (ages 12-25 years). Abstracts should clearly describe methods including study type (cross-sectional, intervention, qualitative), data collection techniques and analysis approaches. Results should include a description of the participant population including number of participants, response rate, age and other demographic characteristics. Discussion should interpret, but not restate, the findings and clinical implications. Submission of partially completed intervention trials or multiple submissions from the same dataset are discouraged.

### Allergy, Immunology & Rheumatology

Abstracts should focus on topics related to allergic or rheumatologic diseases, immune deficiency, development of the immune system, or evaluation of immune responses as they relate to infants, children and adolescents. Other clinical and laboratory research of interest to immunologists, allergists or rheumatologists will also be considered.

### Asthma

Abstracts should be relevant to children and adolescents with asthma. Particular areas of broad interest include the immunobiology, clinical care, models of care delivery, technology that promotes asthma management and compliance, disease pathogenesis, outcomes, epidemiology and severe asthma. Asthma affects almost 10% of the population with substantial consequences so abstracts addressing pharmacology, costs, compliance, and long term sequelae are invited.

### Breastfeeding/Human Milk

Abstracts should be related to breastfeeding behavior or physiology, human milk biochemistry, and child or maternal outcomes related to breastfeeding or human milk intake. Both full-term and preterm infant research and both mother's milk and donor human milk research are of interest.

### Cardiology

Abstracts will encompass all areas relevant to the care of children with cardiovascular conditions. Focus will be on basic research relevant to the heart and cardiovascular system, but will also include studies related to genetics, epidemiology, clinical trials, and outcomes.

### Child Abuse & Neglect

Abstracts should focus on topics related to child abuse and neglect and may encompass clinical care of children and adolescents, clinical and laboratory research, and education. Abstract submissions focusing on prevention or recognition of abuse, epidemiology, and investigation of injuries are highly encouraged.

### Children with Chronic Conditions

Abstracts should focus on the issues faced by children with chronic conditions including but not limited to access to care, management of complex conditions over time, impact on growth and development, nutritional consideration in chronic disease, optimization of complex medical services and transition of care.

## **Clinical Bioethics**

Abstracts should focus on topics related to ethical, legal and policy issues and concerns that stem from dealings between health care professionals and patients.

## **Critical Care**

Abstracts should be relevant to infants, children and adolescents with critical illness. Particular areas of broad interest include the biology, clinical care, models of care delivery, life-extending technology, disease pathogenesis, outcomes, epidemiology and severity of critical illness. Substantial compromise of the function of any organ can result in critical illness so that abstracts addressing cardiac, lung, kidney, liver, lung, marrow, or neurologic injury are invited.

## **Developmental and Behavioral Pediatrics**

We welcome abstracts focused on: 1) the complex developmental processes of infants, children, and adolescents in the context of their families and communities; 2) the biological, psychological, social influence on development in the emotional, social, cognitive, language, and motor domains; 3) mechanisms for primary and secondary prevention of disorders in behavior and development; 4) identification and treatment of disorders of behavior and development such as ADHD and autism through childhood and adolescence; and 5) the influence of parents and parenting on children's behavioral, developmental and mental health, and vice versa.

## **Developmental Biology/Cardiac & Pulmonary Development**

Abstracts that investigate basic developmental mechanisms related to organogenesis of the developing fetus, or disruption of the same that result in malformations and/or disease, including basic science aspects of pulmonary circulation and developmental vascular biology.

## **Emergency Medicine**

Abstracts should focus on topics impacting the acute care of ill and injured infants, children, and adolescents, as well as other clinical and laboratory research of interest to pediatricians, the Pediatric Emergency Medicine specialist, or Hospital Medicine specialist. Abstract submissions focusing on patient safety, education, health policy, and quality outcomes are highly encouraged.

## **Endocrinology**

Abstracts should focus on clinical or basic research, clinical care, education, health policy, or quality outcomes in area of endocrinology, metabolism and diabetes in the fetus, infant, child and adolescent. General topics include but are not limited to growth, puberty, obesity, diabetes, hypothalamic-pituitary axis, gonads, parathyroid, thyroid, adrenal, and bone mineralization.

## **Environmental Health**

Pediatric environmental health is the field of science that studies how the environment influences child health and development. "Environment," in this context, means things in the natural environment such as air, water and soil, and also all the physical, chemical, biological and social features of a child's surroundings. The man-made, or "built," environment includes physical structures where children live, learn and play such as homes, schools, playgrounds and farms, as well as community systems such as roads and transportation systems, land use and waste management practices, and efforts to combat global climate change. Abstract topics also can include the assessment and control of environmental factors that affect child health.

## **Gastroenterology/Hepatology**

Abstracts may encompass basic, translational and/or clinical topics pertaining to investigation of developmental, physiological, and pathogenetic aspects of gastroenterology, pancreatology, hepatology and nutrition in infants, children, and adolescents.

## **General Pediatrics**

Abstracts should focus on topics impacting the care of infants, children, and adolescents, as well as other clinical and laboratory research of interest to the broad range of pediatric generalists in the areas of

Clinical Care, Newborn Nursery, and Primary Care/Prevention. Abstracts related to topic areas not listed here should be submitted directly to those specific categories.

### **Genomics/Epigenomics**

Abstracts should describe work that primarily uses genomic (genotyping, sequencing, gene expression, etc.) or epigenetic (methylation, histone marks, etc.) approaches. Abstracts using these approaches to make new findings, or that describe methodological work centered around these approaches are encouraged, as are studies of monogenic or chromosomal disorders that do not fit into other abstract topic areas.

### **Global Neonatal & Children's Health**

Abstracts should describe research pertaining to the health of newborns, infants, children, and adolescents as well as health systems, medical training, and implementation in low- and middle-income (LMIC) countries. Research may include basic science as well as facility- or community-based interventional trials, observational studies, qualitative studies and other methodologies. Submissions from lead investigators and research teams in LMIC are highly encouraged.

### **Health Equity/Social Determinants of Health**

Abstracts should pertain to studies that aim to understand and/or address social determinants of health (social justice, racism, discrimination, economic stability, food security, physical environment, education, community and social context), adverse childhood experiences, or disparities in health care provision and outcomes. Submission of simple analyses of racial/ethnic differences between participants as a secondary outcome for an existing study is discouraged. Abstracts should clearly describe methods including study type (cross-sectional, intervention, qualitative), data collection techniques and analysis approaches. Results should include a description of the participant population including number of participants, response rate, age and other demographic characteristics. Discussion should interpret, but not restate, the findings and clinical implications. Submission of partially completed intervention trials or multiple submissions from the same dataset are discouraged.

### **Health Services Research**

The goals of health service research are to identify the most effective ways of organizing, managing, financing and delivering high quality health care. Abstracts that focus on how children and families access health care, how much health care costs, inefficiencies and gaps, and what the outcomes of health care are will be considered in this category. When considering submission, one should determine if the abstract is better suited under Quality Improvement Research, Epidemiology, Public Health and Prevention, Health Equity or a particular disease or content area.

### **Hematology/Oncology**

Abstracts should focus on an aspect of the broad range of blood diseases and malignancies in children. Submissions should be of interest to pediatric hematologists-oncologists and, often, individuals in other specialties and generalists. Abstract submissions that report clinical research, translational, and basic science research are highly encouraged. Abstracts that address patient safety, education, health policy, and quality outcomes are also highly encouraged.

### **Historical Perspectives**

Abstracts can be related to any historical perspective about a child-related health issue.

### **Hospital Medicine**

Abstracts should be relevant to the care of hospitalized infants, children, and adolescents with acute and/or chronic conditions. Particular areas of broad interest include clinical and health services research, patient and systems safety, improvement science, clinical care and care coordination, and medical education.

## **Hypertension**

Abstracts should focus on clinical, basic, and translational research topics related to hypertension in infants, children, and adolescents. Submissions focused on the genetics and epidemiology of hypertension, primary and secondary hypertension, the evaluation and management of hypertension, and quality improvement are encouraged.

## **Immunizations/Delivery**

Abstracts should be relevant to the delivery of immunizations, including provider and parent experiences and attitudes about vaccination, vaccine hesitancy and how providers/health care systems are responding to hesitancy, methods of increasing delivery at the practice or systems level, missed opportunities and general challenges to immunization delivery and innovative solutions. Abstracts focused on basic science methodologies (e.g. immunogenicity test) or phase 2 trials are more appropriate for an infectious disease session.

## **Infectious Diseases**

Abstracts should be focused on research related to pediatric infectious diseases, vaccinology, and immune responses. Abstracts may focus on basic, translational, and clinical research in infectious diseases. Studies involving neonates, infants, children, and/or adolescents as well as animal models of infection are welcomed. Topics relevant to the value of infectious diseases consultation are also encouraged.

## **Injury Prevention**

Abstracts should focus on clinical and translational research topics related to injuries in infants, children, and adolescents. Submissions focused on common pediatric injuries involving automobiles, firearms, bicycles, poisonings and other household products are encouraged. Studies that focus on prevention of these injuries are strongly encouraged.

## **Medical Education**

Abstracts should focus on topics related to medical education across the continuum. Examples include assessment of learners; curriculum development, implementation, delivery or evaluation; use of simulation or technology in education or educational assessment; educational innovations; educational issues (wellness/burnout resilience, duty hours, scheduling, etc.); faculty development; mentoring/mentorship; feedback; and educational innovations. Abstracts may focus on medical students, residents, and/or fellowship trainees. Submissions focused on demonstrating the impact of educational innovation on patient outcomes or quality of care are highly encouraged.

## **Mental Health**

Abstracts should focus on studies of mental health issues in pediatrics including, but not limited to, depression, anxiety, bipolar disorder and oppositional/conduct disorders. Submissions can include studies addressing identification and/or management (behavioral and psychopharmacological) by the pediatrician or co-management with mental health professionals in out-patient, ER and in-patient settings as well as in the context of acute and chronic medical illness and family contexts and functioning (e.g., maternal depression). Submissions can also include studies that address mental health epidemiology, service delivery and medical education.

## **Neonatology Subcategories (See Neurology for those topics)**

- **Neonatal General**

Abstracts should address clinical or basic science topics in Neonatal-Perinatal Medicine that do not fit within other Neonatal Subcategories.

- **Neonatal Cardiac Physiology/Pathophysiology/Pulmonary Hypertension**

Abstracts should focus on topics related to neonatal or fetal cardiovascular physiology and pathophysiology. The theme includes both clinical and laboratory research of relevance for

cardiovascular physiology of the fetus and the newborn, including pulmonary vascular biology as it relates to pulmonary hypertension.

- **Neonatal Clinical Trials**

Abstracts should report on novel methods and moderately large rigorous clinical trials which can involve any subcategory area.

- **Neonatal Fetal Nutrition & Metabolism**

Abstracts should investigate physiology and pathophysiology related to fetal nutrition and metabolism, and the unique nutritional requirements and changes in metabolism that mark the adaptation of preterm and term neonates to extrauterine life.

- **Neonatal Follow-up**

Abstracts may include research addressing post discharge outcomes for term and preterm infants with disorders arising in the perinatal period. Studies linking long term neurodevelopmental, pulmonary, or growth/nutrition outcomes with prenatal or immediate postnatal events or following specific neonatal interventions are particularly welcome.

- **Neonatal GI Physiology & NEC**

Abstracts should focus on the development and function of the neonatal gut as well as neonatal gastrointestinal diseases including necrotizing enterocolitis. Abstract submissions in the basic, translational and clinical research areas on this topic are encouraged.

- **Neonatal Hematology & Bilirubin Metabolism**

Abstracts may encompass all aspects of hematology and bilirubin metabolism as it relates to neonatal disorders. Abstract submissions in the basic, translational and clinical research areas on this topic are encouraged.

- **Neonatal Infectious Diseases/Immunology**

Abstracts submitted to this sub-category area focus on research related to any aspect of neonatal infectious diseases or neonatal immunology, and can be basic, translational, clinical or implementation science.

- **Neonatal Nephrology/AKI**

Abstracts may encompass research in all aspects of neonatal nephrology including development, congenital anomalies, acute and chronic kidney injury, renal replacement therapy, and clinical management.

- **Neonatal Pulmonology**

Abstracts may include basic, translational, and clinical research as it relates to pulmonary disorders in neonates. (Exception: Abstracts covering various aspects of Neonatal Respiratory Assessment/ Support/ Ventilation should be submitted to that Neonatology Subcategory.)

- **Neonatal Quality Improvement**

Abstracts should focus on topics impacting the quality and safety of clinical care being provided to infants in the delivery room or intensive care setting. Often this includes the successful implementation of best practices or development of standardized methods to improve care. The use of iterative tools for learning, such as LEAN/Six Sigma or Model for Improvement methodologies with PDSA cycles, is the hallmark of this type of study. Data is traditionally displayed over time using run charts and control charts.

- **Neonatal Respiratory Assessment/Support/Ventilation**

Abstracts should describe innovative techniques involving assisted ventilation, including non-invasive or invasive techniques, use of advanced monitoring tools and techniques, clinical or physiological outcomes, or techniques associated with reduction in ventilation associated complications and adverse outcomes.

- **Neonatal/Infant Resuscitation**

Abstracts should focus on various aspects of both newborn (delivery room) and infant resuscitation, both nationally and globally. These may include animal studies relating neonatal outcomes to various methods of resuscitation; clinical/translational studies regarding use of medications, oxygen, emergent ECMO, delayed cord clamping, etc.; and educational research such as the use of simulation to teach resuscitation techniques and team work to care providers.

- **Neonatal-Perinatal Health Care Delivery: Epidemiology/Health Services Research**

Abstracts focused on studies examining disease trends or factors associated with diseases. In addition, studies examining variation or outcomes in care, organization, or financing of care.

- **Neonatal-Perinatal Health Care Delivery: Practices and Procedures**

Abstracts related to studies detailing a novel approach or device to address a clinical problem. Should focus on clinical research of neonatal health care related to communications, education, policy, risk reduction, enhanced processes or treatment outcomes. Hypothesis-driven, appropriately controlled research submissions are encouraged.

## **Nephrology**

Abstracts should focus on clinical, basic, and translational research topics related to kidney and urologic disorders in infants, children, and adolescents. Submissions focused on renal development, congenital anomalies of the kidney and urinary tract, fluid and electrolytes, glomerulonephritis, kidney stones, acute kidney injury, acute and chronic dialysis, chronic kidney disease, kidney transplantation, pathophysiology of renal disease, genetics of renal disease, urinary tract infections, and quality improvement are encouraged.

## **Neurology Subcategories**

- **Neonatal Neurology: Pre-clinical Research**

Abstracts should focus on any pre-clinical research involving the brain, spinal cord, and peripheral nervous system of fetuses and newborns. Work ranging from cell cultures to animal models is included. Research (including translational research) directed toward creating new therapies, medical procedures, or diagnostics of both normal neonatal neurologic function as well as mechanisms disease & injury are included in this area.

- **Neonatal Neurology: Clinical Research**

Abstracts should focus on clinical research involving the brain, spinal cord, and peripheral nervous system of fetuses and newborns. Studies can range from observational, technological, epidemiological, pharmacological work to clinical trials. Research directed toward improved understanding of neurologic conditions and treatments, in both normal newborns/fetuses and disease/injury processes are included in this area.

- **Neurodevelopment**

Abstracts should focus on clinical research studying development and mechanisms of fetal and neonatal disease/injury/recovery processes. Research directed toward improved understanding of long-term neurodevelopmental consequences, as well as ongoing therapies and care models aimed to improve neurodevelopmental trajectories after fetal and neonatal brain disease/injury are included in this area.

- **Pediatric Neurology**

Abstracts should focus on topics and research involving in care and understanding of neurological diseases affecting children or adolescents, as well as on the understanding of normal mechanisms of neurological development. The entire spectrum of research topics will be considered, ranging from bench to clinical research to population and epidemiological studies. Abstracts primarily focused on issues involving fetuses and newborns should be submitted to the Neonatal Neurology subspecialty categories.

**Obesity**

We are interested in obesity-related studies across the life course, including the prenatal, early childhood, school-aged or adolescent periods. Abstracts can focus on: 1) generating new knowledge about the behavioral, social, economic, environmental, biologic and genetic factors that influence excessive weight gain in children and that increase the disparities in the rates of child obesity; 2) intervention and clinical studies related to the prevention or treatment of child obesity; 3) clinical weight management; 4) associated co-morbidities; or 5) population health or public health policy studies. Please use People-First Language in your abstracts and presentations since describing individuals as obese as opposed to having obesity has been related to bias and discrimination. Here are some examples of how you can use People-First Language: “the child was affected by obesity” instead of “the child was obese” or “children with obesity” instead of “obese children.”

**Palliative Care**

Abstracts should focus on symptom relief in serious neonatal and pediatric illness, with the goal of improving quality of life. This may include, but is not limited to, end-of-life care. Abstract submissions may include clinical and laboratory research, as well as education, health policy, and quality outcomes.

**Pediatric Nutrition**

Abstracts may encompass basic, translational and/or clinical topics pertaining to the investigation of developmental, physiologic, and pathologic aspects of prenatal, neonatal, infant and child nutrition on growth, development, and the impact on health and disease states.

**Pediatric Pharmacy and Therapeutics**

Abstracts should focus on topics related to the safety and efficacy of therapeutic agents in pediatrics emphasizing the critical analyses of well-constructed randomized clinical trials. Attention to the differences in pharmacogenomics and pharmacokinetics of drug metabolism and excretion, especially as it relates to gender, ethnicity and age, is suggested as well as novel methods for testing new drug development and applications.

**Public Health & Prevention**

Abstracts should focus on the research of population- and community-based approaches to prevent disease and promote the health of infants, children, and adolescents. Abstracts to this broad category may encompass the following research areas: 1) assessments of collaborative studies involving pediatricians and public health agencies and organizations to prevent community disease and promote health (e.g., community-based projects to address chronic diseases, investigation of contaminated drinking water, public health disaster planning to manage vulnerable children, and impact of changes made to newborn screening); 2) research of public health data that identify population health needs and trends; 3) assessment of strategies to carry out advocacy for issues such as ensuring access to health care, social, and economic resources, or measuring the impact of changes to vaccine-exemption rules on child health; or 4) evaluation of curricula that incorporate public health and population health skills and perspectives into training for pediatric residents and fellows.

**Pulmonology**

Abstracts should focus on diseases of the respiratory tract in infants and children. Topics will include clinical or basic studies of asthma, cystic fibrosis, and interstitial lung disease. Abstract submissions focusing on patient safety, quality improvement, education and health policy are also encouraged.

### **Quality Improvement/Patient Safety**

Abstracts should focus on studies designed to improve system, clinic or provider performance. Often this includes the successful implementation of best practices or development of standardized methods to improve care. The use of iterative tools for learning, such as LEAN/Six Sigma or Model for Improvement methodologies with PDSA cycles, is the hallmark of this type of study. Data is displayed over time using run charts and control charts. Non-intervention studies, including development and testing of quality measures, development and testing of methods for assessing implementation and QI success, or development and testing of curricula for teaching QI in training programs are appropriate for this topic area. (Note: NICU and delivery room QI should be submitted to *Neonatal-Perinatal Health Care Delivery: Quality Improvement*)

### **Sedation Medicine**

Abstracts of interest include those that address any aspect of providing sedation to children outside of the operating room. Topics may include, but are not limited to: education, training and certification; safety; simulation; quality improvement; novel or integrative strategies; patient and family-centered outcomes; emotional and psychological outcomes; long-term neurodevelopmental outcomes; impact of sedation practice on procedural outcomes; sedation governance; disparities in sedation provision; and basic, translational, and clinical research.

### **Social Media & Technology**

Abstracts should pertain to the use and effects of social media and related digital technologies (Internet, mobile/smart devices, apps, e-books, etc.) as well as possible interventions among pediatric populations including adolescents and young adults. This category is NOT inclusive of abstracts related to electronic medical records, telemedicine, or medical device development. Abstracts should clearly describe methods including study type (cross-sectional, intervention, qualitative), data collection techniques and analysis approaches. Results should include a description of the participant population including number of participants, response rate, age and other demographic characteristics. Discussion should interpret, but not restate, the findings and clinical implications. Submission of partially completed intervention trials or multiple submissions from the same dataset are discouraged.

### **Telemedicine/EHR/Medical Informatics**

Abstracts should focus on innovation in the use and evaluation of telehealth, telemedicine, electronic health records and medical informatics for the care of children, infants, and adolescents in general pediatric and pediatric specialty care.