It can be argued that gastroenterology is the oldest pediatric subspecialty. The traditional foundation for pediatric care was to ensure childhood health – as manifest by well-paced growth and adequate nutrition - and to prevent the major causes of infant mortality (infectious diarrhea and malnutrition). Thus, focused management of children with gastrointestinal (GI) disease and nutritional disorders has been practiced for centuries. However, the formal emergence of a body of knowledge and an organized focus on these disorders in early life is a relatively recent event. Pediatric Gastroenterology began to be recognized as a discipline separate from adult gastroenterology in the 1960s.

HOW DID THE SUBSPECIALTY OF PEDIATRIC GASTROENTEROLOGY EVOLVE?

Several major forces converged to allow development of the subspecialty of pediatric gastroenterology; these are outlined in TABLE 1. Thus the need was recognized for special skills and multidisciplinary teams to evaluate, manage, and monitor the young child with GI disease. (1, 2) Development of the discipline was spurred by a cadre of pediatricians who had an interest in disorders of the gut and liver. Many of the early practitioners of “formal” pediatric gastroenterology, having been trained in Internal Medicine divisions of gastroenterology, were able to successfully adapt and extrapolate their skills, expertise, and techniques to the care of children with GI diseases. (1) In turn, internist gastroenterologists recognized the complexity of pediatric GI diseases (“children are not little adults”) and were willing to defer to their pediatrician colleagues. Pediatric generalists, while comfortable managing most acute GI diseases, recognized the impact of chronic GI diseases on growth and agreed that these patients would be best cared for by trained subspecialists. (3) As a result, there was a rapidly increasing demand for pediatric gastroenterologists.

Seminal Events:

1. Introduction of the Concept
While many European centers had developed a GI disease-specific focus (e.g. celiac centers), in North America the term “Pediatric Gastroenterology” may have first been displayed in a comprehensive review written by Claude Morin and Murray Davidson, and published in an adult-disease oriented journal (Gastroenterology) in 1967. (4) The authors stated that “the major purpose of
this literature review is to acquaint the internist with research and clinical problems in pediatric gastroenterology. If the reader comes away with the impression that children are different … the efforts expended will have been justified”. This piece was well received and was abetted by an update by Merv Silverberg and Davidson which followed shortly in 1970. \(5\)

2. A Focus on Optimal Nutrition for Children

It had long been recognized that there were multiple biologic benefits of nutrient administration via the enteral route, even in the presence of alimentary ailments or diseases of other organ systems that seemingly precluded orogastric feeding. \(6\) Further understanding of digestive physiology over the ensuing years allowed for improvements in clinical practices and techniques, such as the development of tubes for nasogastric or nasojejunal feeding and the design of specialized formulas for hospitalized children. The science and practice of enteral feeding flourished as specific innovative therapeutic formulae were developed and applied to pediatric gastroenterology practice. However, beginning in the early 1970s an increasing fascination with total parenteral nutrition (TPN), developed by Wilmore and Dudrick in 1968 \(7\), was evident. This brought good news and bad. The technique was lifesaving for children with intractable diarrhea and other GI disorders; however there were multiple adverse effects that required careful monitoring of children receiving TPN. Remarkable advances in parenteral and enteral nutrition strategies and application of the new methods of enteral or parenteral support led to a great demand for individuals trained in pediatric nutrition as an area of special interest within the field. In the mid-1970s, the emphasis on nutrition of the hospitalized patient and the resultant creation and expansion of multidisciplinary nutrition support teams provided considerable impetus for the development of divisions of Pediatric Gastroenterology and Nutrition. Furthermore, research focused on digestive physiology, the trophic effect of intraluminal nutrients, and the ability to sustain the lives of children with otherwise fatal GI diseases necessitated trained subspecialists.

3. Procedures and Techniques

Another significant force driving the nascent field of pediatric gastroenterology was the validation and utilization of clinical and research procedures and techniques to safely investigate the child with presumed GI disease:

1. Crosby Capsule Biopsy

The development of a safe and reliable method to “sample” tissue from the GI tract of children was of particular importance in the development of the subspecialty. Capsule acquisition of tissue from the small intestine allowed precise clinical management of disorders such as celiac disease and led to clinical and basic research into GI pathobiology. Several centers emerged, based on a unified effort to understand small intestinal mucosal lesions in children in a wide range of disorders and the effect of small intestinal disease on growth and development. \(1, 2, 8\)
2. Endoscopy
The benefits of small intestinal biopsy and the value of endoscopy in adults led to modification of adult endoscopic instruments and techniques for use in children. The availability of fiber optic endoscopy instruments scaled down for use in infants and children allowed the relatively noninvasive identification and treatment of diseases that previously required surgical intervention (e.g. colonic polyp removal and esophageal variceal sclerotherapy). (9-12) With an enhanced ability to accurately diagnose children with Inflammatory Bowel Disease the management of Crohn's disease and ulcerative colitis became an increasingly significant component of pediatric gastroenterology practice. Several centers focused their attention to investigation of the pathogenesis of Crohn's disease and improved corticosteroid sparing management strategies in children.

3. Liver Biopsy
In a similar fashion, the ability to safely and reliably obtain liver tissue for examination and analysis led to the recognition of unique hepatobiliary diseases in the children. The percutaneous liver biopsy technique of Dick Hong and Bill Schubert was shown to be safe in infants and children. (13, 14) This, in turn, led to investigation into aspects of disordered hepatic physiology and to a better understanding of metabolic liver disease. Centers that focused on pediatric hepatology soon became a subset of many divisions of pediatric gastroenterology.

GROWTH AND DEVELOPMENT OF THE FIELD

With these forces converging the field rapidly gained momentum. The next key ingredient to establishing the formal field was to create and sustain a critical mass.

Around this time several interrelated events helped to expand and validate the concept of Pediatric Gastroenterology as an academic subspecialty:
1. “Formal” training programs were established in many institutions. By 1985 there were 64 pediatric gastroenterology fellowship training programs in North America. This is in sharp contrast to 1972 – when I approached Bill Schubert – asking if I could “do a fellowship in pediatric gastroenterology”. His response – “What’s that?”
2. Research flourished - the application of state-of-the-art cellular and molecular biology techniques and the emergence of molecular genetics enhanced our understanding and recognition of the pathophysiological basis of many GI disorders in childhood.
3. A gathering place was created - the increasing number of trainees and the robust research enterprise created a demand for greater opportunities to meet and share science. In the mid-1960s the opportunities for like-minded pediatricians with an interest in GI disease to get together and discuss research and clinical interests were limited and, of course, there was no internet! The annual meeting of the Society for Pediatric Research (SPR) offered a GI
subsection, during which platform presentations stimulated broad and rich discussions. Over the subsequent years, in view of the progressive increase in submitted abstracts, the number of GI sessions at the SPR increased to three. Internal Medicine dominated GI meetings and scientific fora, such as the yearly meetings of the American Gastroenterological Association (AGA) and the American Association for the Study of Liver Disease (AASLD), were also venues for enrichment and engagement. With the increasing number of high quality abstract submissions and research addressing diseases in children these meetings embraced pediatric input.

**Establishment of a Pediatric Gastroenterology Society**

In 1972, Merv Silverberg and Larry Gartner conceived the first organization devoted to pediatric gastroenterology – the **“Pediatric Gut Club”**. This morphed into what was then called the **North American Society for Pediatric Gastroenterology** (NASPG). Silverberg served as the first president and Dan Caplan as secretary/treasurer. The newly-established society took advantage of the gathering of scientists and clinicians who were attending the SPR, AGA, or AASLD meetings to set up academic and social gatherings. These often took the form of evening “satellite” symposia. NASPG thrived – adding “N” to the title in 1989 to reflect the emphasis on Nutrition - and the number of members grew rapidly – from 124 in 1977 to over 400 in 1989. Next, as a manifestation of maturation to adolescence, NASPGAN leadership decided to step out on their own. Thus they established a “free-standing” educational and scientific annual meeting in Chicago in 1987. Then in 2001, with a decision that truly reflected maturity, “Hepatology” was added to the society’s name, which is now the North American Society of Pediatric Gastroenterology, Hepatology and Nutrition (NASPGHAN).

At present, there are 1429 members of NASPGHAN, which includes 285 trainee members. Their annual meeting was attended by more than 900 individuals (members and allied health professionals) in 2006. The society has well-established committees to address aspects of research, training, clinical care, and specific diseases, as well as nutrition in health and disease. In 1996 NASPGHAN established a foundation, the Children’s Digestive Health and Nutrition Foundation (CDHNF) to support young investigators in the field. In 2006 CDHNF awarded 6 young investigator grants and one faculty transition award.

**The Role of Texts and Journals**

To further legitimize the maturation of pediatric gastroenterology as a pediatric subspecialty, a spate of dedicated textbooks appeared. The first textbook devoted to pediatric GI disease to be published in the United States (1971) was co-authored by Arnie Silverman, Claude Roy, and Frank Cozzetto. (15) Joyce Gryboski followed in 1975 with a text that focused on GI disorders in infants. (16) In 1991, a two-volume, multiple-authored text appeared. (17) Fred Suchy published a text devoted to liver disease in children in 1994. (18)
The *Journal of Pediatric Gastroenterology and Nutrition* (JPGN), first published in 1982, with Emi Lebenthal as the founding editor-in-chief, has played an important on-going role in consolidating the development of pediatric gastroenterology and nutrition. In 1991, JPGN, which had become a focal point for the subspecialty, was adopted as the official journal of NASPGHAN.

**Awards and Honors**

Harry Shwachman, who established a center of excellence for pediatric gastroenterology in Boston in the early 1960s, was recognized by NASPGHAN for his seminal contributions to the field. The *Shwachman Award*, established in 1984, has been given annually to an individual for outstanding achievement in pediatric gastroenterology. In addition, an award for excellence – the *Murray Davidson Award* - is given annually by the Section of Gastroenterology and Nutrition of the American Academy of Pediatrics. In 2005 NASPGHAN established a *Distinguished Service Award* that is presented annually.

**International Conferences**

Communication with colleagues facing similar GI issues in other countries began in the late 1970s via international conferences. A series of Joint Congresses (with the European Society of Pediatric Gastroenterology and Nutrition) and World Congresses, a gathering of the four major pediatric gastroenterology societies (with the addition of Latin America and Asian societies), have further enriched the scientific and clinical basis of our field.

**CERTIFICATION IN PEDIATRIC GASTROENTEROLOGY**

In the early 1980s NASPG leadership commissioned the preparation of guidelines for training in pediatric gastroenterology. (19) It was further decided in 1985 to formally establish the discipline by seeking board certification for specialists in Pediatric Gastroenterology and to establish a subboard in the subspecialty (TABLE 2).

**Rationale and Process for Establishing the Subboard**

NASPG membership was polled in 1986 in an attempt to gauge their collective interest in certification; 62% of the members responded and 74% of the respondents voiced support for subspecialty certification. Following a letter to Bob Brownlee of the American Board of Pediatrics (ABP), a formal proposal was submitted in September 1987 by a NASPG committee chaired by Bill Klish. The petition cited the growing interest in pediatric gastroenterology, including the rapid growth in the membership of NASPG and the expansion of training programs in the field. The petition recognized the projected impact of certification on the existing practice of pediatric gastroenterology, stating that "the development of certification examinations would have a profound impact on the quality of practice by dictating standards, providing a mechanism for ensuring a minimal competence and a framework for monitoring continued competence for
patient care.” In addition, the petitioners postulated that certification would “provide a basis to discourage the performance of invasive diagnostic procedures in children when not indicated.”

“It is astonishing with how little reading a doctor can practice medicine, but is not astonishing how badly he may do it”. William Osler

The application was approved by the ABP Committee on New Subspecialties in late 1987 and by the ABP Board of Directors in January 1988 and submitted to the American Board of Medical Specialties (ABMS) in March of that year. In 1989, the ABMS approved the establishment of the sub-board in Pediatric Gastroenterology as the eighth ABP subboard to issue a certification examination.

The First Subboard members
In 1988 the first Subboard of Pediatric Gastroenterology of the ABP was appointed (TABLE 3). Of the seven original subboard members one was nominated by the Association of Medical School Pediatric Department Chairmen, three by the ABP, one by the SPR, one by the American Pediatric Society, and one by NASPGAN. Each member had recognized expertise in specific aspects of the field and, because of that, the entire spectrum of the subspecialty was thought to be adequately represented and balanced. The members of the first Subboard were given staggered terms (see TABLE 3) of appointment, although one of the original members, when contacted recently stated that “I was staggering my whole term.” Marty Ulshen was chosen to be the Medical Editor.

The First Meeting of the Sub-board (January 3-4, 1989 - in Chapel Hill, NC)
Led by Tim Oliver, Senior Vice President, and Ms. Diane Butzin, Vice President for Examination Development, of the ABP, the qualifications for certification, special requirements for training programs, and eligibility criteria were established and the spectrum of content to be covered in the examination was hammered out and apportioned. Diane Butzin and Bob Guerin, the ABP’s psychometrician, then discussed examination development, detailing the major steps in preparing and scoring an examination. The group was introduced to Elaine Brown, Senior Supervising Examinations Editor at the time, who over the next few years would serve as editor and educator, cruise director and drill sergeant. One of her goals was to assure (via frequent unambiguous memoranda) that we arrived well-prepared for all subboard meetings, that we used the meetings wisely in order to adhere to the strict deadlines to assure that the examination books were ready in time for administration, and that we carefully and thoughtfully (and, sometimes humorously) discussed each proposed examination question.

Deciding on the Content
A detailed content outline for the initial subspecialty certifying examination was agreed upon and a set of content specification statements (CSS) was developed
by the sub-board as a blueprint for the examination. The purpose was to define the knowledge that a certified subspecialist should be expected to demonstrate on an examination. This was not meant to be a curriculum guide, and was intended to be a work-in-progress. The subboard decided that the field of pediatric gastroenterology should be broadly defined and that certification should reflect expertise in bowel disease, disorders of the pancreas, diseases of the liver, and nutrition in health and disease. The relevant aspects of each area were incorporated into the content outline.

The Issue of Clinical Nutrition - Separate and Equal?
Early on there was discussion as to whether the subboard should consider the name Pediatric Gastroenterology and Nutrition. This idea was rejected primarily based on the conclusion that the field of nutrition was much broader than that covered by gastroenterologists. There was later discussion as to whether to pursue the feasibility of providing a Certificate of Added Qualification (CAQ) in clinical nutrition – this was also rejected. In 1991 the sub-board approved a petition from the American Board of Nutrition that the ABP and American Board of Internal Medicine (ABIM) form a conjoint board of the ABMS.

Creating the First Examination
The first meeting was a de facto question writing techniques workshop! We were encouraged to write questions that tested reasoning rather than memory. We were schooled on the item types used in ABP examinations and the rules were imprinted into our brains:
1. Offer “one realistic response that is clearly the BEST of those offered; other responses (distracters) should be “plausible or partially correct, but not as good…”
2. Avoid – “apples and oranges”, “always or never” and the equally verboten – “practically never”, “reverse truths”. Also - no jargon (e.g. bolused, scoped, etc) or excess verbiage.
3. No true or false, no “all of the above”
4. EXCEPTION questions should be the exception!
These rules basically eliminated any of the brilliant questions that I had in mind!

We were asked to create case scenarios in order to place the problem in context. Marty Ulshen recalls: “Joyce Gryboski wrote one of the first subboard questions about one of her school-age patients who was called ‘Pukey’ by his classmates in view of his persistent gastroesophageal reflux.” “Pukey” maintained a special place among the subboard members for some time.

Including high-quality graphic material in the examination was especially challenging. We set out to collect material that was clearly illustrative of the point in the question. However, this was the era of 35-mm color slides, which often lead to unsatisfactory copies/prints. In addition, there was a limitation on the number of color graphics that could be included in the printed examination book because of cost considerations. This presented a dilemma to the subboard
members since GI is uniquely a “colorful” field. (Let your imagination wander). We were specifically concerned about the quality of endoscopic photos in black and white since none of us had ever used a black and white endoscope!! Someone mentioned the wild idea of a computer-based examination – clearly an idea that was ahead of its time.

For subsequent meetings, each of the subboard members would arrive with a carefully thought out set of questions. The group would review each proposed question to assure that it was fair, realistic, and “correct medically”; they would agree that there was one correct answer and that the options were not ambiguous. Each accepted question had to match the content outline and the CSS. References were used to verify controversial issues. We were asked to verify that “this is a question that you would be comfortable having in your next examination”. Since this was largely an era into which evidence-based medicine had not yet permeated, the latter decision was difficult and clearly based on expert opinion -- sort of “what one sees depends on where one stands.” Elaine Brown would review and revise our submitted candidate questions for format, mechanics, and consistency. When the dust settled after the meeting and the items were thoroughly edited, it was left to the medical editor to sort through all of the accepted questions and ensure their accuracy.

I seem to recall, with some frustration, that after review of my questions by the entire sub-board that only three to four out of every 10 would be judged acceptable! On further reflection, while that may not appear to be a high average, election to the baseball Hall of Fame is full of individuals who only a hit a ball three out of every ten at bats!

The First Examinees – the Subboard Members!
The original subboard members and the medical editor were invited to obtain certification by successfully navigating a certifying examination culled from the ABIM gastroenterology subboard examination. Approximately 100 relevant questions were extracted from the ABIM examination by an outside specialist in pediatric gastroenterology. With relief, we were notified that we all passed and the first eight certificates were issued.

Criteria for Eligibility And Training Requirements
The next step was to decide on the eligibility and training requirements for candidates to sit for the first examination. Criteria were established based on successful completion of a training program or on time spent in the subspecialty. Similarly, the initial requirements for certification of fellowship programs by the Pediatric RRC of the ACGME were established.

The first exam
The first examination was administered to 334 individuals at 11 sites on November 30, 1990. This lead to the certification of the initial “class” of 275 board-certified pediatric gastroenterologists. The feedback to the subboard from
the examinees was generally positive; those letters that provided “constructive criticism” were reviewed and the comments taken into account for the subsequent examinations. The subboard met discussing standard-setting with Diane Butzin and Bob Guerin. We were informed that the examination met “psychometric standards’ in terms of difficulty, discrimination, and reliability. A cutting score of 400 was agreed upon, which meant that 80% of the candidates would pass. Note: in subsequent meetings the subboard discussed the “70% correct” rule, and Bob Guerin introduced the now adopted Hofstee Compromise (not to be confused with the Shawshank Redemption).

Subsequent Meetings
The subboard met yearly to review “previously used questions” to ensure their relevance and accuracy and to correct or revise if necessary. The subboard would also review questions submitted by diplomates (certified pediatric gastroenterologists who were not members of the subboard). They also reviewed the CSSs for updates or modifications. In a self-sustaining mode, they reviewed candidates to replace departing subboard members and developed a letter delineating responsibilities of the position in order for the nominee to grant informed consent. Finally, the group agreed on components for renewal of certification in the subspecialty in order to ensure sustained competence in the field.

“The education of the doctor which goes on after he has his degree is, after all, the most important part of his education”. John Shaw Billings

Program Directors Meeting
Dr Oliver noted that the ABP had served as a facilitator for meetings of other subspecialty program directors. This important venue for information sharing and open discussion was adopted by the subboard and the first pediatric gastroenterology program directors meeting was held in 1992 in Chicago. This important activity has become an integral part of the NASPGHAN activities - program directors now meet at the Annual Meeting and at the May Digestive Disease Week. Some of the issues addressed during that first meeting - training requirements and the work force (current status and future projections) - remain important issues and have been the subject of ongoing scrutiny and discussion.

CURRENT STATUS OF THE SUBSPECIALTY OF PEDIATRIC GASTROENTEROLOGY

Work Force, Scope of Activity, and Training
The pediatric gastroenterology certifying examination is now offered biannually. Since 1990, 872 certificates have been awarded in our subspecialty. (20, 21) In 2005, there were 100 first-time applicants for the certification examination. Of these applicants, 40% were women and 65% were American Medical School Graduates. Approximately 59% planned to practice exclusively in pediatric gastroenterology in an academic setting. An additional 18% planned to practice
exclusively in pediatric gastroenterology, but in a private practice or combined private practice and academic setting.

As a pediatric subspecialty, pediatric gastroenterology is the seventh largest discipline. The mean age of certified pediatric gastroenterologists is 49.0 years, with approximately 96% ranging from 31 to 65 years old. In a recent work-force survey commissioned by NASPGHAN, 53% of respondents felt that there were too few pediatric gastroenterologists and 50% of section and practice heads reported that they were currently recruiting partners. (21) There was a self-perceived shortage of pediatric gastroenterologists as compared with seven years previous, despite a constant proportion of pediatric gastroenterologists per million children. (21)

In 2005, the ABP contacted all accredited pediatric gastroenterology training programs in the United States (n = 48) and Canada (n = 5) to obtain tracking information. (20) The number of fellows enrolled in pediatric gastroenterology (training years 1-3) has been steadily increasing, with an 80% increase since 1997. The total percentage of women in training at that time was 42.5%. The number of American Medical School Graduate fellows has increased since 1997, from 48.7% to 65.2% in 2005.

The Issue of Liver Transplantation

In 1983, the National Institutes of Health Consensus Development meeting concluded that “liver transplantation was no longer an experimental procedure” and that it “deserved broader application.” (22) Liver transplantation then emerged as the standard of care for children with irreversible acute and chronic liver failure and various metabolic disorders. As a result, the need for skilled, qualified hepatologists to manage patients before and after liver transplantation dramatically increased. The AASLD hoped to codify a body of knowledge that would establish criteria and identify the special training that individuals involved in “advanced” hepatology and liver transplantation required. They conducted a work force study to gather information as to the volume and type of patients referred to transplantation centers and the special skills required to care for these complex patients, both before and after transplantation. The study demonstrated that transplant hepatology is considered a distinct and separate discipline outside the purview of the typical practicing gastroenterologist regardless of the amount of hepatology training possessed by that individual. The AASLD began discussion with the ABP and the ABIM regarding a CAQ to focus on Transplantation Hepatology as a focused discipline within the medical subspecialty of gastroenterology. The New Subspecialties Committee of the ABP received the petition for subcertification in pediatric transplantation hepatology in 2003, and the first examination was offered in 2006.

THE FUTURE
“A great deal has been achieved, but so much remains to be done for sick children with gastrointestinal disease, both in treatment and prevention, and with a particular challenge in the developing world” (1)

Pediatric gastroenterologists are major components of clinical practices, education and training programs for future leaders, and investigative initiatives to advance human health and to improve clinical care and outcomes. Recent research provides insight into the combined role of genetic predisposition and environmental stimuli in the expression of a variety of GI, liver, and nutritional conditions; this offers the opportunity to prevent or modify phenotypic expression of diseases by addressing a potential chronic GI disease during early life. (23)

The creation of a certification examination in pediatric gastroenterology has, in my opinion, met the objectives set by the originators. Certification has had an impact on the quality of practice by dictating standards and by providing a mechanism for ensuring competence. The end result is a thriving clinical and academic subspecialty that continues to attract the “best and the brightest”, carry out high-quality basic and translational research, and utilize innovative strategies to improve patient care.

FOOTNOTE: I want to express my sincere thanks to Elaine A. Brown, Manager, Editorial Department, the American Board of Pediatrics, for her assistance in providing me with archival material and (in a flashback to the early 1990s) her terrific editing skills!

REFERENCES
18. Suchy FJ. Liver Disease in Children Mosby-Year Book, St Louis, 1994

FOOTNOTE: I want to express my sincere thanks to Elaine A. Brown, Manager, Editorial Department, the American Board of Pediatrics, for her assistance in providing me with archival material and (in a flashback to the early 1990s) her terrific editing skills!
TABLE 1 - Major Forces Contributing to the Development of the Subspecialty of Pediatric Gastroenterology

1. Recognition of the nature of the immature gastrointestinal tract
2. Understanding of the unique spectrum of inherited and acquired diseases that bedevil children
3. A focus on optimal nutrition for children with gastrointestinal disease in order to minimize the adverse effects on growth and development
4. Modification of diagnostic and treatment procedures for use in infants and children
5. Development of complex therapies for children with gastroenterological disorders
6. Creation of a critical mass (development of training programs, expansion of the workforce, establishment of meetings, textbooks, journals) and a society dedicated to the subspecialty

TABLE 2 - Timeline for Development of an ABP Certified subspecialty Of Pediatric Gastroenterology

<table>
<thead>
<tr>
<th>Date</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1984-1985</td>
<td>Discussion among NASPG leadership re: formal certification</td>
</tr>
<tr>
<td>August 16, 1985</td>
<td>NASPG committee (chaired by Dr. William Klish) sent a letter to Dr. Brownlee regarding the formation of the sub-board</td>
</tr>
<tr>
<td>September 10, 1987</td>
<td>Preliminary petition for the sub-board sent to ABP from NASPGN committee</td>
</tr>
<tr>
<td>September 25, 1987</td>
<td>Dr. Klish visited the ABP to discuss the petition</td>
</tr>
<tr>
<td>Fall 1987</td>
<td>ABP Committee on New Subspecialties approved the petition</td>
</tr>
<tr>
<td>January 16, 1988</td>
<td>Petition approved by ABP Board of Directors</td>
</tr>
<tr>
<td>March 10, 1988</td>
<td>Petition sent to ABMS</td>
</tr>
<tr>
<td>March 21-22, 1988</td>
<td>Preliminary review by the ABMS</td>
</tr>
<tr>
<td>July 25, 1988</td>
<td>COCERT approved the petition</td>
</tr>
<tr>
<td>September 23, 1989</td>
<td>ABMS approved the petition – thereby authorizing the ABP to issue</td>
</tr>
<tr>
<td></td>
<td>Certificates of Special Qualifications in Pediatric Gastroenterology</td>
</tr>
<tr>
<td>January 3-4, 1989</td>
<td>First meeting of the Pediatric Gastroenterology sub-board</td>
</tr>
<tr>
<td>May 25, 1990</td>
<td>ABP Board of Directors approved the special requirements</td>
</tr>
<tr>
<td>November 30, 1990</td>
<td>First certifying examination offered (275 passed)</td>
</tr>
<tr>
<td>September 24, 1991</td>
<td>ACGME approved the special requirements for GME programs in Pediatric</td>
</tr>
<tr>
<td></td>
<td>Gastroenterology</td>
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<tr>
<td>March 2, 1992</td>
<td>Proposed special requirements reviewed by RRC</td>
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<tr>
<td>July 1, 1992</td>
<td>Special requirements effective</td>
</tr>
<tr>
<td>Name</td>
<td>Years</td>
</tr>
<tr>
<td>-----------------------------</td>
<td>---------------</td>
</tr>
<tr>
<td>Susan S. Baker</td>
<td>1995 – 2000*</td>
</tr>
<tr>
<td><strong>William F. Balistreri</strong></td>
<td>1989 – 1993*</td>
</tr>
<tr>
<td>John D. Bancroft</td>
<td>2005 -- 2010</td>
</tr>
<tr>
<td>John T. Boyle</td>
<td>1993 -- 1998</td>
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<tr>
<td>John C. Bucuvalas</td>
<td>2001 -- 2006</td>
</tr>
<tr>
<td>Carlo Di Lorenzo</td>
<td>2006 -- 2011</td>
</tr>
<tr>
<td>Chris J. Dickinson</td>
<td>2005 -- 2010</td>
</tr>
<tr>
<td>Deborah K. Freese</td>
<td>2000 -- 2005</td>
</tr>
<tr>
<td>Richard J. Grand</td>
<td>1991 -- 1993 **</td>
</tr>
<tr>
<td><strong>Harry L. Greene</strong></td>
<td>1989 -- 1992</td>
</tr>
<tr>
<td>David A. Gremse</td>
<td>2007 -- 2012</td>
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<tr>
<td><strong>Joyce D. Gryboski</strong></td>
<td>1989 -- 1990</td>
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<td>Melvin B. Heyman</td>
<td>1997 – 2002*</td>
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<td>A. Craig Hillemeier</td>
<td>1999 – 2004*</td>
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<tr>
<td>Esther J. Israel</td>
<td>2006 -- 2011</td>
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<td>Ronald E. Kleinman</td>
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<tr>
<td><strong>William J. Klish</strong></td>
<td>1989 – 1994*</td>
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<td>M. Susan Moyer</td>
<td>2003 – 2008*</td>
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<tr>
<td>Karen F. Murray</td>
<td>2007 -- 2012</td>
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<tr>
<td><strong>Jay A. Perman</strong></td>
<td>1989 -- 1990</td>
</tr>
<tr>
<td>Kathleen B. Schwarz</td>
<td>1994 -- 1999</td>
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<tr>
<td>Robert J. Shulman</td>
<td>2001 – 2006*</td>
</tr>
<tr>
<td>Judith M. Sondheimer</td>
<td>1991 – 1996*</td>
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<td>Frederick J. Suchy</td>
<td>1995 -- 2000</td>
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<td>James L. Sutphen</td>
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<td>John N. Udall, Jr.</td>
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</tr>
<tr>
<td>Jon A. Vanderhoof</td>
<td>1993 -- 1998</td>
</tr>
<tr>
<td><strong>W. Allan Walker</strong></td>
<td>1989 -- 1992</td>
</tr>
<tr>
<td><strong>John B. Watkins</strong></td>
<td>1989 -- 1992</td>
</tr>
</tbody>
</table>

**Bold** = First Sub-Board (Special Competency Committee) for Pediatric Gastroenterology, 1990

* Chair

** resigned

**Note:** Martin Ulshen has served as medical editor throughout
In 1990, the first Pediatric Gastroenterology subspecialty board examination was held to certify pediatric gastroenterologists as boarded subspecialists. This required three years of clinical and research training, which included a continuity clinic to follow patients during the two research years. A committee of faculty (within and outside of Pediatric GI) was established to monitor the progress of the fellows during their research experience. During the early 1990s, Harvard established a Clinical Effectiveness Program as a partnership between its hospitals and the Harvard School of Public Health View Pediatric Gastroenterology Research Papers on Academia.edu for free. The most common cause is rotavirus. A key element in the approach of a child with diarrhea is determining their hydration status, which determines the fluid management. Laboratory tests are not routinely required, as most of the cases, they do not affect the management and it should be indicated only in selected cases. Several treatments have been studied to reduce the duration of the diarrhea. Pediatric Gastroenterology is participating in the pediatric subspecialty Fall Match. Applications for programs participating in the NRMP match are generally accepted beginning in the mid-summer of the year prior to the start of fellowship, usually during the beginning of the PL-3 year. Interviews are conducted in late summer and fall. Most Pediatric Gastroenterology programs participate in the NRMP Pediatric Subspecialties Fall Match (PL-3 year), and most also utilize ERAS for the applications. Programs not participating in the match program typically interview during the same time period. Pediatric gastroenterology established itself as a distinct subspecialty in the 1970s, along with significant progress in clinical and laboratory research in the field. The rapidly increasing knowledge in the field led to shaping a unique profile for pediatric gastroenterologists that differs from that of adult specialists in many aspects. A PGHN specialist requires broad expertise in both general pediatric and pediatric gastroenterology. Nutrition, growth, and development need to be adequately assessed and considered when evaluating a child with gastroenterological complaints.